

Sequence 58, Appl
Sequence 1, Appli
Sequence 1, Appli
Sequence 792, App
Sequence 14, Appl
Sequence 135, App
Sequence 1447, App
Sequence 21, Appl
Sequence 1, Appli
Sequence 1, Appli
Sequence 24, App
Sequence 56, Appl
Sequence 344, App
Sequence 3, Appli
Sequence 5, Appli
Sequence 5, Appli

4 US-09-601-198-58
2 US-08-446-855A-1
3 US-09-150-741-1
4 US-09-540-236-792
4 US-09-596-002-14
4 US-09-601-198-135
4 US-09-134-001C-1447
4 US-09-601-198-60
4 US-09-627-122-21
4 US-08-323-170B-1
4 US-08-954-441-1
4 US-08-998-416-224
4 US-09-601-198-56
4 US-08-916-421A-1
4 US-08-961-527-344
4 US-08-480-604A-5
4 US-08-405-496A-5
4 US-08-915-136-5

ALIGNMENTS

RESULT 1

US-08-956-171E-392

Sequence 392, Application US/08956171E

Patent No. 6593114

GENERAL INFORMATION:

APPLICANT: Charles Kunsch

Gil H. Choi

Patrick S. Dillon

Craig A. Rosen

Steven C. Barash

Michael R. Fannon

TITLE OF INVENTION: Staphylococcus aureus Polynucleotides and Sequences

NUMBER OF SEQUENCES: 5256

CORRESPONDENCE ADDRESS:

ADDRESSER: Human Genome Sciences, Inc.

STREET: 9410 Key West Avenue

CITY: Rockville

STATE: Maryland

COUNTRY: USA

ZIP: 20850

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette, 3.50 inch, 1.4mb storage

COMPUTER: HP Vectra 486/33

OPERATING SYSTEM: MSDOS version 6.2

SOFTWARE: ASCII Text

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/956.171E

FILING DATE: 20-Oct-1997

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 60/009,861

FILING DATE: January 5, 1996

APPLICATION NUMBER: 08/781,986

FILING DATE: January 3, 1997

ATTORNEY/AGENT INFORMATION:

NAME: Mark J. Hyman

REGISTRATION NUMBER: 46,789

REFERENCE/DOCKET NUMBER: PB248P1

TELECOMMUNICATION INFORMATION:

TELEPHONE: (240) 314-1224

TELEFAX: (301) 309-8439

INFORMATION FOR SEQ ID NO: 392:

SEQUENCE CHARACTERISTICS:

LENGTH: 2424 base pairs

TYPE: nucleic acid

STRANDEDNESS: double

TOPOLOGY: linear

SEQUENCE DESCRIPTION: SEQ ID NO: 392:

US-08-956-171E-392

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: June 25, 2004, 11:23:56 ; Search time 113 Seconds

(without alignments)

6634.855 Million cell updates/sec

Title: US-09-103-287-1

Perfect score: 1351

Sequence: 1 atagagtaaggagttttatat.....ttaatatgtttataatagag 1351

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 3%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents NA.*

1: /cgm2_6/ptodata/2/ina/5A.COMB.seq.*

2: /cgm2_6/ptodata/2/ina/5B.COMB.seq.*

3: /cgm2_6/ptodata/2/ina/6A.COMB.seq.*

4: /cgm2_6/ptodata/2/ina/6B.COMB.seq.*

5: /cgm2_6/ptodata/2/ina/PTCUS.COMB.seq.*

6: /cgm2_6/ptodata/2/ina/backfiles1.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1330.2	98.5	2424	4	US-08-956-171E-392
2	913.4	67.6	1329	4	US-09-134-001C-2296
3	599.2	44.4	619	4	US-08-936-165A-179
4	397.6	29.4	11864	4	US-08-961-527-61
5	396	29.3	2715	4	US-08-940-572-1
6	389.6	28.8	888	3	US-08-714-918-61
7	389.6	28.8	888	3	US-09-315-61
8	389.6	28.8	888	3	US-09-315-61
9	389.6	28.8	888	3	US-09-265-315-61
10	389.6	28.8	888	3	US-09-266-417-61
11	389.6	28.8	888	3	US-09-528-709-61
12	367	27.2	1267	3	US-09-527-745-61
13	367	27.2	1267	3	US-08-961-683-115
14	350.8	26.0	1873	4	US-09-536-784-115
15	308.8	22.9	1825	4	US-08-107-532A-3260
16	133.8	9.9	1479	4	US-08-940-572-3
17	100.4	7.4	640681	4	US-09-328-352-897
18	82.8	6.1	1467	4	US-09-790-988-1
19	78.2	5.8	1830121	4	US-09-543-681A-2779
20	78.2	5.8	1830121	4	US-09-557-884-1
21	78	5.8	1230025	4	US-09-643-990A-1
22	68	5.0	5361	3	US-09-198-452A-1
23	68	5.0	6152	3	US-08-973-462-2
24	54.2	4.2	2223	1	US-08-973-462-2
25	54.2	4.0	1830121	4	US-08-257-073-4
26	54.2	4.0	1830121	4	US-09-557-884-1
27	54	4.0	1485	4	US-09-643-990A-1
					Sequence 601, App

Db 316 TATTCAACACACACACTTTCTCTAGAACACACAGCATTTTAAATGAAATTTGCAGAAAGTT 257
Qy 1097 TATGTAAGCAGATCGTGTATCTTATGTCGAATTTTGTGCTCAATTTAGAGAAATTCG 1156
Db 256 TATGTAAGCAGATCGTGTATCTTATGTCGAATTTTGTGCTCAATTTAGAGAAATTCG 197
Qy 1157 GCGCATTAACGATACAGATTTAAATGATAAAATTTGGAGTGCATCGTTCATTAATGAG 1216
Db 196 GCGCATTAACGATACAGATTTAAATGATAAAATTTGGAGTGCATCGTTCATTAATGAG 137
Qy 1217 A-TCTTATTAATGATTAAGAACAAATTTGATAAATGCTGTTTATTTATGAGTGCAGGT 1275
Db 136 ATTCTTATTAATGATTAAGAACAAATTTGATAAATGCTGTTTATTTATGAGTGCAGGT 77
Qy 1276 GATATTCAAAATTTACAAATGATGATTTATGATAAATTTAGCAATGAAATGCGTTTAA 1335
Db 76 GATATTCAAAATTTACAAATGATGATTTATGATAAATTTAGCAATGAAATGCGTTTAA 17
Qy 1336 TATGTTTATTAATGAG 1351
Db 16 TATGTTTATTAATGAG 1

RESULT 4

US-08-961-527-61/c
; Sequence 61, Application US/08961527
; Patent No. 6420135
; GENERAL INFORMATION:
; APPLICANT: Charles Kunsch
; TITLE OF INVENTION: Streptococcus pneumoniae Polynucleotides and Sequences
; NUMBER OF SEQUENCES: 391
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Human Genome Sciences, Inc.
; STREET: 9410 Key West Avenue
; CITY: Rockville
; STATE: Maryland
; COUNTRY: USA
; ZIP: 20850
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.50 inch, 1.4Mb storage
; COMPUTER: HP Vectra 486/33
; OPERATING SYSTEM: MSDOS version 6.2
; SOFTWARE: ASCII Text
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/961,527
; FILING DATE:
; CLASSIFICATION: 424
; PRIORITY APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Brookes, A. Anders
; REGISTRATION NUMBER: 36,373
; REFERENCE/DOCKET NUMBER: PB340P1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (301) 309-8504
; TELEFAX: (301) 309-8512
; INFORMATION FOR SEQ ID NO: 61:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 11864 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
US-08-961-527-61

Query Match 29.4%; Score 397.6; DB 4; Length 11864;
Best Local Similarity 59.0%; Pred. No. 1.7e-84;
Matches 758; Conservative 0; Mismatches 514; Indels 12; Gaps 4;
Qy 31 TATCAATTTGCGGAATTAAGGTTCTGCGCATGAGTTCATTAAGCACAAATCATGATGAT 90
Db 1749 TATCAATTTATCGGAATTAAGGATCAGGATGAGTTCGCTTGGCTTGAATGTTGAC 1690

Qy 91 TTAGGACATGAAGTTCAAGGATCGGATTAATGAGAACTACGTTATTTACAGAAAGTTGCTCT 150
Db 1689 ATGGGGCACAAAGTTCAAGGATCAGATGTTGAAAGTACTACTTTTACCCACGGGCTT 1630
Qy 151 AGAAATGAAGGATATAAAATTAATACCAATTTGGTCTTAATACATAAAGAGAGATACGTA 210
Db 1629 GAGCAGCAGGATTAACCATTTCTCTTTGATGAAAGAAATCTAGACGGTGAACGAA 1570
Qy 211 GTTATACAAGTAAATGCAATTT---CGCGAGTAGCCATGAAGAAATAGTAGTGCACATCAA 267
Db 1569 ATTATCGCTGGAATGCTTTGCTCCAGATAACAACTGCGAAATGCGTATGCGAGCAA 1520
Qy 268 TTGAAATAGATGTTGAAGTTATAATGATTTTATGAGCAGATTAATGATCAATTAAT 327
Db 1509 AATGGTATCAGCTACAAACGTTTACCATGAGTTTCTAGTAGCTTTATGCGTGACTTTGT 1450
Qy 328 TCAGTAGCTGAATGCTGTCACATGTTAAACTTCTACACACAGGTTTATTAATCAATGTT 387
Db 1449 AGCATGGAGTAGCAGGAGCACATGGAAACTTCAAGCAGAGTATGTTGTCATGTC 1390
Qy 388 ATGAATGGTGATAAAAAGACTTCAATTTTAAATGGTGTGACACAGGTATGGATGCGCT 447
Db 1389 TTGCTCACATTAACATACCAGCTTCTTGATGGAGATGGACAGGTGCTGTTGCGCC 1330
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Db 1269 CCAGATCTCTATTAATCAACCAATGACCTTGACATCCAGATTAATTTTCAAGTCTC 1210
Qy 568 AATGATGTTTTTGTGATGCTTCCAAAGAAATGACATTAATGTTTAAAGAGGTATTTGCT 627
Db 1209 GAGGATGTTTTTAAATGCTTTTAAACGACTATGCCAAACAAATCACCAGGGTCTTTTGTGTC 1150
Qy 628 TGGGCTGATGATGAACATCTACGTAATTAATGAAGCAGGTGTTTCAATTTTATTAATGTA 687
Db 1149 TATGGTGAAGATGCTGAATTCGTAAGATTAAGTCTGTAAGCACCAGTATTTATTAATGAT 1090
Qy 688 TTTAAAGATTCGG---ATGACATTTATGCTCAAAATATTTCAAAATTTACGATTAAGAGTACT 744
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Qy 745 GCTTTTGTATGATGAGTGGTGAATGATGATCACTTCCTGCTTCCCAATTAATGAT 804
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Qy 805 GACCATACAGTTTAAATGATTAAGTCTTAATTCGATTAATTTAGAGAGAGCTAGAT 864
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Qy 865 GTTACAAATATTAAGAGAGCATTAAGAAAGTTTGGTGGTGTAAACGTCGTTTCAATGAA 924
Db 909 TTGAACITTTGGTGGTGGACACTTTGAAACAAATTTGCGGCTTTTAAACGTCGTTTCACTGAG 850
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Db 849 AAAATTTGCAATGATACAGTGAATTAATGATGATTTTGGCCACCATTCACAGAGAAATTAAT 790
Qy 985 GCTCAATTTGACACAGCAGAAAGAAATATCCACATAAAGAGTTGTTGTCAGTATTTCAA 1044
Db 789 GCGACCTTTGGATGCGGCTGTCAGAAATACCCAGCAAGAAATTTGTAGCAGTCTTTCAA 730
Qy 1045 CCACACACTTTCTCTAGAACACAGCAATTTTAAATGAATTTGCGAGAAAGTTTATGTA 1104
Db 729 CCGCATACCTTTACAGAAACCATTTGCTTTGTCAGCAGCTTTGCGCAGCTTTTAAACCAA 670
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Mon Jun 28 09:30:48 2004

609 GTTAAGTAGAAGACCTAGCCCAAAATCAACAAAAACACCAAGTAGTACTGTGAA 550
1219 CTTATTAAGTATTAGAACAAATTTGATAATGCTGTGTTTATTTAATGAGTGCAGGTGAT 1278
549 AATGTTTCTCCATCTCCCTAGACCATGACAAATGCTGTTTACGCTCTTTATGGAGCAGGAGAC 490
1279 ATTCAAAATTTACAAATGCAAT 1302
489 ATCCAAACCTATGATACTCAAT 466

RESULT 5
US-08-940-572-1
Sequence 1, Application US/08940572
Patent No. 6310193
GENERAL INFORMATION:
APPLICANT: Wallis, Nicola G.
APPLICANT: Black, Michael T.
APPLICANT: Hodgson, John E.
APPLICANT: Knowles, David J.
APPLICANT: Lonetto, Michael A.
APPLICANT: Nicholas, Richard O.
APPLICANT: Stodola, Robert K.
TITLE OF INVENTION: No. 6310193el MnrC
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
ADDRESSEE: Dechert, Price & Rhoads
STREET: 4000 Bell Atlantic Tower, 1717 Arch Stre
CITY: Philadelphia
STATE: PA
COUNTRY: USA
ZIP: 19103-2793
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/940,572
FILING DATE:
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/024022
FILING DATE: 16-AUG-1996
APPLICATION NUMBER: US 08/889711
FILING DATE: 08-JUL-1997
ATTORNEY/AGENT INFORMATION:
NAME: Dickinson, Q. Todd
REGISTRATION NUMBER: 28,354
REFERENCE/DOCKET NUMBER: P50533-04
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215/994-2252
TELEFAX: 215/994-2222
TELEX:
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 2715 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
US-08-940-572-1
Query Match 29.3%; Score 396; DB 4; Length 2715;
Best Local Similarity 59.0%; Pred. No. 2.6e-84;
Matches 757; Conservative 0; Mismatches 515; Indels 12; Gaps 4;
31 TATCATTTTGGGAATTAAGGTTCTGGCATGAGTTCATTAGCACAAATCATGCAATGAT 90
408 TATCATTTTATCGGAATTAAGGATCGGGATGAGTGCCTTGGCTTGTGATGTTGACCG 467
91 TTAGGATGAGTTCAGGATCGGATATTGAGAACTACGTTATTACAGAAAGTTGCTTT 150

468 ATGGGGCAACAGGTTCAAGGATCAGATGTTGAAAAGTACTACTTACCACAAAGGGTCTT 527
151 AGAAATAAGGGGATAAAAAATATTACCAATTTGGTGTCTTAATACATAAAGAGAGATATGTA 210
528 GAGCAGCGAGGAATTACCAATTTCTTCTTTTGTGATGAAAGAAATCTAGACGGGTATGTA 587
211 GTTATACAGGTAATGCAAT---CGGAGTAGCCATGAAGAAATAGTACGTGCGACATCAA 267
588 AATTATCGCTGGAAATGCCCTTTGCTCCAGATAAACCGTGGAAATGCTATGCGGACCA 647
268 TTGAAATTAGATGTTGTAAGTTATAATGATTTTATAGACAGATTTATGATCAATATACT 327
648 AATGGTATCAGCTACAAAAGTTACCATGAGTTTCTAGTAGCTTTATCGGTGACTTTGTT 707
328 TCAGTAGCTTAACCTGGTGCACATGGTAAACCTTCTACACAGGTTTATTTATCATGTT 387
708 AGCATGGGAGTAGCAGGAGCACATGGAAGAACTTCAACGACAGGTATGTTGTTCTCATGTC 767
388 ATGAATGGTGATAAAGACATTTCAATTTTAAATGCTGATGACACAGGTATGCGATGGCT 447
768 TTGCTCACATTAACAGATACAGGCTTTCTTGATTTGGAGATGGACAGGTGCTGTTGGCC 827
448 GAAAGTGATTTATTCGCTTTTGAAGCATGTGAATATAGACGTCCTCTTTTAAAGTTATAAA 507
828 AATGCCAAATTTTGTCTTTGAACTCAGCGAATATGAGCGTCACTTTCATGCTTACCAC 887
508 CCTGATTACGCAATATGACAAATTTGATTTTCGATCATCTGATTTATTTTCAAGATATT 567
888 CCAGAAATCTCTATTATCAACAATGACTTTGACCATCCAGATTTATTTTCAAGTCTC 947
568 AATGATGTTTTGATGCAATCCCAAGAAATGGCACATAATGTTAAAAAAGGTATTATTTGT 627
948 GAGGATGTTTTCAATGSCCTTTAAACGACTATGCCAAACHAATTTACCAAGGGTCTTTTGT 1007
628 TGGGTGATGATGAACATCTACGTAAATTTGAAGCAGATGTTCCAAATTTATTTACTATGA 687
1008 TATGGTGAAGATGCTGAATTTGGTAAGATTACGTCTGATGACCAATTTATTTATTTGTT 1067
688 TTTAAAGATTGCG---ATGCAATTTATGCTCAAAATATTCAATTAAGGATAAGGTACT 744
1068 TTTGAAGCTGAAGGCAATGACTTTGTAGCTAGTATCTTTCTTGTTCAACACTGGTTCA 1127
745 GCTTTTGTATGTTGATGAGTGGATGTTTATGATCACTTCTGCTCTCCACAAATATGTT 804
1128 ACCTTCACCGTTCAATTTCCGTGGACAAAACCTTGGGGAAATCCACATTCACCTTTGTT 1187
805 GACCATACAGTTTAAATGCAATTAGCTGTAAATTCGATTTAGTTATTTAGAGAGCTAGAT 864
1188 CGTCACAAATCATGAATGGACGCGTTATTTGTTCTTTTACACAGCAGGATTTGAT 1247
865 GTTACAAATATTAAAGAACATTAGAAAACGTTTGGTGTGTTTAAACGTCCTTTCAATGAA 924
1248 TTGAACCTTGGTGGCTGAGCACTTTGAAAACATTTTGGCGGTGTTTAAACGTCGTTTCACTGAG 1307
925 ACTACAAATTCGAATCAAGTTATTTAGATGATTTATGCAACCAATCCACAGAAATTAGT 984
1308 AAAATTTGTCAATGATCAGTGATTTATTTGATGACTTTGCCCCATCATCCACAGAAATATT 1367
985 GCTACAAATTCACACAGCACGAAAGAAATATCCACATAAAGAAAGTTGTTTGGAGTATTCAA 1044
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1045 CCACACACTTTCTTAGAACACAGCAATTTTAAATGAATTTTGAAGAAAGTTTATGATAAA 1104
1428 CCGCATACCTTTTACAGAACCAATTTGCCCTGTTTGGACGACTTTTGCCTTGTATTAACCA 1487
1105 GCAGATCGTGATTTCTTATGTAATTTTGGCTCAATTAG---AGAAAA---CTTGGCGCA 1161
1488 GCAGATGCTGTTTATCTAGCGCAATTTTATGGCTCGGCTCGTGAAGTAGATCATGTTGAC 1547
1162 TTAAGGTACAGATTTTAAATTTGATAAAAT---TGGAGGTGATCGTTCATTTAATGAAGAT 1218
1548 GTTAAGGTAGAGACCTTAGCCAAATTAATCAACAAAAAACCAAGTGAATTTACTGTTGAA 1607

QY 1219 CTATTATAGTATAGAACATTTGATATGCTGTTTATTTATTTATGCTGCTGCTGAT 1278
DB 1608 AATGTTTCTCCATCTCTAGACCATGACATGCTGTTTATTTATTTATGCTGCTGCTGAT 1667
QY 1279 ATTCAAAAATTACAAAATGCATAT 1302
DB 1668 ATCCAAACCTATGATATCAATTT 1691

RESULT 6
US-08-714-918-61/c
; Sequence 61, Application US/08714918
; Patent No. 6037123
; GENERAL INFORMATION:
; APPLICANT: Benton, Bret
; APPLICANT: Lee, Ving
; APPLICANT: Malouin, Francois
; APPLICANT: Martin, Patrick K.
; APPLICANT: Schmid, Molly B.
; APPLICANT: Sun, Dongxu
; TITLE OF INVENTION: STAPHYLOCOCCUS AUREUS ANTIBACTERIAL
; TITLE OF INVENTION: TARGET GENES
; NUMBER OF SEQUENCES: 111
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; STREET: Suite 4700
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066

COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08714,918
FILING DATE: September 13, 1996
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/009,102
FILING DATE: December 22, 1995
APPLICATION NUMBER: 60/003,798
FILING DATE: September 15, 1995
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 222/005
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 61:
SEQUENCE CHARACTERISTICS:
LENGTH: 888 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-714-918-61

Query Match 28.8%; Score 389.6; DB 3; Length 888;
Best Local Similarity 92.3%; Pred. No. 6e-83;
Matches 468; Conservative 1; Mismatches 31; Indels 7; Gaps 6;
QY 849 TTTAGAGCTAGATGTTTACAAATTTAAAGACATTTAGAACTTTGGTGGTGTAA 908
DB 888 TTTAGAGCTAGATGTTTACAAATTTAAAGACATTTAGAACTTTGGTGGTGTAA 831
QY 909 AGCTCGTTTCAATGAACTACAAATTTGCAATCAAGTTATTTAGATGATTTGCAACCA 968

DB 830 ACCTC-NNTCNATGSACTACAAATCCAAATCAAGTTAATGTAGCTGATTTATGNACACCA 772
QY 969 TCCAAAGAGAAATTAAGTGTACAAATTCACACAGACGCAAGAAATATCCACATAAGAAGT 1028
DB 771 TCCAAAGAGAAATTAAGTGTGNNCAATTTGAACCGCAAGAAATATCCACATAAGAAGT 712
QY 1029 TGTTCAGTATTTT-C-AACCAACACATTTCTCTAGACACACAGCAATTTTAAATGAATTTG 1087
DB 711 TGTTCAGTATNTCAAACACACATTTCTCTAGACACACAGCAATTTTAAATGAATTTG 652
QY 1088 CAGAAAGTTTATGTAAGGAGATCGTGATTT-CTTATGTGAAATTTTGTGCTCAATTTAG 1145
DB 651 CAGAAAGTTTAAAGTAAAGCAGATCGTGATTTCTTATGTGAAATTTTGTGATCAATTTAG 592
QY 1146 AGAAATTTCTGCGCATTAACAGATACAAAGATTTAAATGATAAAATTCGAGTGCATCGTT 1205
DB 591 AGAAATTTCTGCGCATTAACAGATACAAAGATTTAAATGATAAAATTCGAGTGCATCGTT 532
QY 1206 CATTAATGAAGATCTTATTAATGATTTAGAACAAATTTGATAATGCTGTTTATTTTCAATTTA 1264
DB 531 AATTAATGAAGATCTTATTAATGATTTAGAACAAATTTGATAATGCTGTTTATTTTCAATTTA 472
QY 1265 TGGTGCAGTGTATTTCAAAATTTACAAATGCAATTTTAGATAAAATTCGAGTGCATGAAA 1324
DB 471 TGGTGCAGTGTATTTCAAAATTTACAAATGCAATTTTAGATAAAATTCGAGTGCATGAAA 412
QY 1325 ATGGTTTTTAATATGTTTATAATAGAG 1351
DB 411 ATGGTTTTTAATATGTTTATAATAGAG 385

RESULT 7
US-09-265-315-61/c
; Sequence 61, Application US/09265315
; Patent No. 6187541
; GENERAL INFORMATION:
; APPLICANT: Benton, Bret
; APPLICANT: Lee, Ving J.
; APPLICANT: Malouin, Francois
; APPLICANT: Martin, Patrick K.
; APPLICANT: Schmid, Molly B.
; APPLICANT: Sun, Dongxu
; TITLE OF INVENTION: METHODS OF SCREENING FOR COMPOUNDS
; TITLE OF INVENTION: ACTIVE ON STAPHYLOCOCCUS AUREUS
; NUMBER OF SEQUENCES: 111
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; STREET: Suite 4700
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/265,315
FILING DATE: March 9, 1999
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/714,918
FILING DATE: September 13, 1996
APPLICATION NUMBER: 60/009,102
FILING DATE: December 22, 1995
APPLICATION NUMBER: 60/003,798
FILING DATE: September 15, 1995
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.

us-09-103-287-1.rn1

Mon Jun 28 09:30:48 2004

REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 240/247
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: Storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICANT: US/09/265,315
FILING DATE: March 9, 1999
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/714,918
FILING DATE: September 13, 1996
APPLICATION NUMBER: 60/009,102
FILING DATE: December 22, 1995
APPLICATION NUMBER: 60/003,798
FILING DATE: September 15, 1995
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 240/247
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 61:
SEQUENCE CHARACTERISTICS:
LENGTH: 888 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-09-265-315-61

Query Match 28.8%; Score 389.6; DB 3; Length 888;
Best Local Similarity 92.3%; Pred. No. 6e-83;
Matches 468; Conservative 1; Mismatches 31; Indels 7; Gaps 6;

QY 849 TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 908
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 909 ACGTCGTTTCAATGAACTACAAATGCAATCAAGTTATTTAGATGATTTGCACACCA 968
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 830 ACGTC-NNTCNATGANACTACAAATGCAATCAAGTTATTTAGATGATTTGCACACCA 772
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 969 TCCAGAGAGAAATTAGTGTACAAATGCAATCAAGTTATTTAGATGATTTGCACACCA 1028
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 1029 TGTTCAGATTTTC-AACACACACATTTCTCTAGAACACAAAGCAATTTTAAATGAATTTG 1087
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 711 TGTTCAGATTTTC-AACACACACATTTCTCTAGAACACAAAGCAATTTTAAATGAATTTG 652
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 1088 CAGAAAGTTTATGTTAAAGAGCAATGCTGTATT--CTTATGTGAAATTTTGGCTCAATTTAG 1145
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 1146 AGAAATTTCTGGCGCATTAACGATTAAGATTTTAAATGATTAATTTGAGTGCATCGTT 1205
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 591 AGAAATTTCTGGCGCATTAACGATTAAGATTTTAAATGATTAATTTGAGTGCATCGTT 532
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 1206 CATTAAATGAAGATTTTAAATGATTAATTTGATTAATTTGAGTGCATCGTT 1264
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 531 AATTAAATGAAGATTTTAAATGATTAATTTGATTAATTTGAGTGCATCGTT 472
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 1265 TGGTGCAGGTGATTTTCAAAATTTCAAAATTTCAAAATTTCAAAATTTCAAAATTTCAAAATTT 1324
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 1325 ATCGGTTTAAATGTTTAAATGATTTTAAATGATTTTAAATGATTTTAAATGATTTTAAATGATTT 1351
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831

RESULT 8
US-09-265-315-61/c
Sequence 61, Application US/09265315
Patent No. 6187541
GENERAL INFORMATION:
APPLICANT: Benton, Bret
APPLICANT: Lee, Vang J.
APPLICANT: Malouin, Francois
APPLICANT: Martin, Patrick K.
APPLICANT: Schmid, Molly B.
APPLICANT: Sun, Dongxu
TITLE OF INVENTION: METHODS OF SCREENING FOR COMPOUNDS
TITLE OF INVENTION: ACTIVE ON STAPHYLOCOCCUS AUREUS
TITLE OF INVENTION: TARGET GENES
NUMBER OF SEQUENCES: 111
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street

STREET: Suite 4700
CITY: Los Angeles
STATE: California
COUNTRY: U.S.A.
ZIP: 90071-2066
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: Storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICANT: US/09/265,315
FILING DATE: March 9, 1999
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/714,918
FILING DATE: September 13, 1996
APPLICATION NUMBER: 60/009,102
FILING DATE: December 22, 1995
APPLICATION NUMBER: 60/003,798
FILING DATE: September 15, 1995
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 240/247
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 61:
SEQUENCE CHARACTERISTICS:
LENGTH: 888 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-09-265-315-61

Query Match 28.8%; Score 389.6; DB 3; Length 888;
Best Local Similarity 92.3%; Pred. No. 6e-83;
Matches 468; Conservative 1; Mismatches 31; Indels 7; Gaps 6;

QY 849 TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 908
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 909 ACGTCGTTTCAATGAACTACAAATGCAATCAAGTTATTTAGATGATTTGCACACCA 968
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 830 ACGTC-NNTCNATGANACTACAAATGCAATCAAGTTATTTAGATGATTTGCACACCA 772
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 969 TCCAGAGAGAAATTAGTGTACAAATGCAATCAAGTTATTTAGATGATTTGCACACCA 1028
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 771 TCCAGAGAGAAATTAGTGTACAAATGCAATCAAGTTATTTAGATGATTTGCACACCA 712
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 1029 TGTTCAGATTTTC-AACACACACATTTCTCTAGAACACAAAGCAATTTTAAATGAATTTG 1087
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 711 TGTTCAGATTTTC-AACACACACATTTCTCTAGAACACAAAGCAATTTTAAATGAATTTG 652
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 1088 CAGAAAGTTTATGTTAAAGAGCAATGCTGTATT--CTTATGTGAAATTTTGGCTCAATTTAG 1145
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 651 CAGAAAGTTTATGTTAAAGAGCAATGCTGTATT--CTTATGTGAAATTTTGGCTCAATTTAG 592
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 1146 AGAAATTTCTGGCGCATTAACGATTAAGATTTTAAATGATTAATTTGAGTGCATCGTT 1205
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 591 AGAAATTTCTGGCGCATTAACGATTAAGATTTTAAATGATTAATTTGAGTGCATCGTT 532
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 1206 CATTAAATGAAGATTTTAAATGATTAATTTGATTAATTTGAGTGCATCGTT 1264
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 531 AATTAAATGAAGATTTTAAATGATTAATTTGATTAATTTGAGTGCATCGTT 472
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 1265 TGGTGCAGGTGATTTTCAAAATTTCAAAATTTCAAAATTTCAAAATTTCAAAATTTCAAAATTT 1324
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831
QY 1325 ATCGGTTTAAATGTTTAAATGATTTTAAATGATTTTAAATGATTTTAAATGATTTTAAATGATTT 1351
Db TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCAATTAGAAACGTTTGGTGGTTAA 831

QY 1325 ATGCGTTTAAATGTTTATAATAG 1351
DB 411 ATGCGTTTAAATGTTTATAATAG 385

RESULT 9

US-09-266-417-61/c
; Sequence 61, Application US/09266417
; Patent No. 6228588
; GENERAL INFORMATION:
; APPLICANT: Benton, Bret
; APPLICANT: Lee, Ving J.
; APPLICANT: Malouin, Francois
; APPLICANT: Martin, Patrick K.
; APPLICANT: Schmid, Molly B.
; APPLICANT: Sun, Dongxu
; TITLE OF INVENTION: METHODS OF SCREENING FOR COMPOUNDS
; TITLE OF INVENTION: ACTIVE ON STAPHYLOCOCCUS AUREUS
; TITLE OF INVENTION: TARGET GENES
; NUMBER OF SEQUENCES: 111
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Suite 4700
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/266,417
; FILING DATE: March 9, 1999
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/714,918
; FILING DATE: September 13, 1996
; APPLICATION NUMBER: 60/009,102
; FILING DATE: December 22, 1995
; APPLICATION NUMBER: 60/003,798
; FILING DATE: September 15, 1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 240/248
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-3440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 61:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 888 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-09-266-417-61

Query Match 28.8%; Score 389.6; DB 3; Length 888;
Best Local Similarity 92.3%; Pred. No. 6e-83;
Matches 468; Conservative 1; Mismatches 31; Indels 7; Gaps 6;
QY 849 TTATAGAGAGCTAGATGTTTACAAATTAAGAGCAATTAGAAACGTTTGGTGGTTAA 908
DB 888 TTATAGAGAGTAGATG-TCCCAATNTTAAAGAGCATTAGAAACG-TTGGTGGTTAA 831
QY 909 ACCTGCTTTCAATGAACATCAATTCGCAATCAAGTTATGTAGATGATTCACACCA 968
DB 830 ACCTC-NNTCNATGACTACATCGCAATCAAGTTAATGTAGCTGATTATGNACACCA 772

QY 969 TCCAAAGAGAAATTAGTCTCAATTTGACACAGCAGGAAAGAAATATCCACATAAAGAAGT 1028
DB 771 TCCAAAGAGAAATTAGTCTGNNCAATTTGAACCGCAGGAAAGAAATATCCACATAAAGAAGT 712
QY 1029 TGTTCAGTATTTTC-AAACCACACACTTTCTCTAGAGACACAGCAATTTTAAATGAATTTG 1087
DB 711 TGTTCAGTATNTCAAACACACACACTTTCTCTAGAGACACAGCAATTTTAAATGAATTTG 652
QY 1088 CAGAAAGTTTAAAGAGCAGATCGTGTATT--CTTATGCGAAATTTTGGCTCAATTTAG 1145
DB 651 CAGAAAGTTTAAAGTAAAGCAGATCGTGTATTCTTATTGTGAAATTTTGGATCAATTTAG 592
QY 1146 AGAAATTTCTGGCGCAATTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGT 1205
DB 591 AGAAATTTCTGGCGCAATTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGT 532
QY 1206 CATTAAAGAGATCTTATTAAATGATTTAGAACAAATTTGATATGCTGTGTTT-ATTTA 1264
DB 531 AATTAATGAGATTTCTATTAAATGATTTAGAACAAATTTGATATGCTGTGTTT-ATTTA 472
QY 1265 TGGGTGCGAGTGATATTCAGAAATTTACAAATTTAGATATTTAGATATTTAGATATTTAGAT 1324
DB 471 TGGGTGCGAGTGATATTCAGAAATTTACAAATTTAGATATTTAGATATTTAGATATTTAGAT 412
QY 1325 ATGCGTTTAAATGTTTATAATAG 1351
DB 411 ATGCGTTTAAATGTTTATAATAG 385

RESULT 10

US-09-528-709-61/c
; Sequence 61, Application US/09528709
; Patent No. 6630303
; GENERAL INFORMATION:
; APPLICANT: Senton, Bret
; APPLICANT: Lee, Ving
; APPLICANT: Malouin, Francois
; APPLICANT: Martin, Patrick K.
; APPLICANT: Schmid, Molly B.
; APPLICANT: Sun, Dongxu
; TITLE OF INVENTION: STAPHYLOCOCCUS AUREUS ANTIBACTERIAL
; TARGET GENES
; NUMBER OF SEQUENCES: 111
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Suite 4700
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/528,709
; FILING DATE: 17-Mar-2000
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/714,918
; FILING DATE: September 13, 1996
; APPLICATION NUMBER: 60/009,102
; FILING DATE: December 22, 1995
; APPLICATION NUMBER: 60/003,798
; FILING DATE: September 15, 1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 222/005

TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 61:
SEQUENCE CHARACTERISTICS:
LENGTH: 888 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
SEQUENCE DESCRIPTION: SEQ ID NO: 61:
US-09-528-709-61

Query Match 28.8%; Score 389.6; DB 4; Length 888;
Best Local Similarity 92.3%; Pred. No. 6e-83; 31; Indels 7; Gaps 6;
Matches 466; Conservative 1; Mismatches 31; Indels 7; Gaps 6;
849 TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCATTAGAAAGCTTTGGTGGTTAA 908
888 TTTAGAGAGTTAGTG-TCCCAATNTTAAAGAGCATTAGAAAG-TTGGTGGNGTTAA 831
909 ACGTCGTTTCAATGAACTCAATGCAATCAAGTTATTGTAGATGATTGACACCA 968
830 ACGTC-NNTCNATGANACTCAATCGCAATCAAGTTAATGTAGCTGATTGACACCA 772
969 TCCAGAGAAATTAGTCTCAATTTGACACAGCAGGAAAGAAATCCACATAAAGAAGT 1028
771 TCCAGAGAAATTAGTGNNCAATTTGAAACCGCAGGAAAGAAATCCACATAAAGAAGT 712
1029 TGTTCAGTATTTC-AACCACACACTTTCTCTAGAACACACAGCATTTTAAATGAATTG 1087
711 TGTTCAGTATTTC-AACCACACACTTTCTCTAGAACACACAGCATTTTAAATGAATTG 652
1088 CAGAAAGTTTATGTAAGCAGATCGTGATT--CTTATGTGAATTTTGGCTCAATTAG 1145
651 CAGAAAGTTTATGTAAGCAGATCGTGATT--CTTATGTGAATTTTGGCTCAATTAG 592
1146 AGAAATTTCTGCGCATTAACCATACAGATTTAATGATAAATTTGGAGTGCATCGTT 1205
591 AGAAATTTCTGCGCATTAACCGACAGATTTAATGATAAATTTGGAGTGCATCGTT 532
1206 CATTATGAAGATCTTATTAATGTAATAGACAAATTTGATAATGCTGTTGTTT-ATTTA 1264
531 AATTATGAAGATCTTATTAATGTAATAGACAAATTTGATAATGCTGTTGTTT-ATTTA 472
1265 TGGTGCAGGTGATATTCAAAATTTACAAAATGTCATATTAGTAATAGGCTGAAGA 1324
471 TGGTGCAGGTGATATTCAAAATTTACAAAATGTCATATTAGTAATAGGCTGAAGA 412
1325 ATGCGTTTCAATATGTTTATATAGAG 1351
411 ATGCGTTTCAATATGTTTATATAGAG 385

RESULT 11
US-09-527-745-61/c
Sequence 61, Application US/09527745
Patent No. 6638718
GENERAL INFORMATION:
APPLICANT: Benton, Bret
Lee, Ving
Malouin, Francois
Martin, Patrick K.
Schmid, Molly B.
Sun, Dongxu
TITLE OF INVENTION: STAPHYLOCOCCUS AUREUS ANTIBACTERIAL
TARGET GENES
NUMBER OF SEQUENCES: 111
CORRESPONDENCE ADDRESS:
ADDRESS: Lyon & Lyon
STREET: 633 West Fifth Street
Suite 4700
CITY: Los Angeles

STATE: California
COUNTRY: U.S.A.
ZIP: 90071-2066
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/527,745
FILING DATE: 17-Mar-2000
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/714,918
FILING DATE: September 13, 1996
APPLICATION NUMBER: 60/009,102
FILING DATE: December 22, 1995
APPLICATION NUMBER: 60/003,798
FILING DATE: September 15, 1995
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 222/005
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 61:
SEQUENCE CHARACTERISTICS:
LENGTH: 888 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
SEQUENCE DESCRIPTION: SEQ ID NO: 61:
US-09-527-745-61

Query Match 28.8%; Score 389.6; DB 4; Length 888;
Best Local Similarity 92.3%; Pred. No. 6e-83; 31; Indels 7; Gaps 6;
Matches 466; Conservative 1; Mismatches 31; Indels 7; Gaps 6;
849 TTTAGAGAGCTAGATGTTACAAATATTAAAGAGCATTAGAAAGCTTTGGTGGTTAA 908
888 TTTAGAGAGTTAGATG-TCCCAATNTTAAAGAGCATTAGAAAG-TTGGTGGNGTTAA 831
909 ACGTCGTTTCAATGAACTCAATGCAATCAAGTTATTGTAGATGATTGACACCA 968
830 ACGTC-NNTCNATGANACTCAATCGCAATCAAGTTAATGTAGCTGATTGACACCA 772
969 TCCAGAGAAATTAGTCTCAATTTGACACAGCAGGAAAGAAATCCACATAAAGAAGT 1028
771 TCCAGAGAAATTAGTGNNCAATTTGAAACCGCAGGAAAGAAATCCACATAAAGAAGT 712
1029 TGTTCAGTATTTC-AACCACACACTTTCTCTAGAACACACAGCATTTTAAATGAATTG 1087
711 TGTTCAGTATTTC-AACCACACACTTTCTCTAGAACACACAGCATTTTAAATGAATTG 652
1088 CAGAAAGTTTATGTAAGCAGATCGTGATT--CTTATGTGAATTTTGGCTCAATTAG 1145
651 CAGAAAGTTTATGTAAGCAGATCGTGATT--CTTATGTGAATTTTGGCTCAATTAG 592
1146 AGAAATTTCTGCGCATTAACCATACAGATTTAATGATAAATTTGGAGTGCATCGTT 1205
591 AGAAATTTCTGCGCATTAACCGACAGATTTAATGATAAATTTGGAGTGCATCGTT 532
1206 CATTATGAAGATCTTATTAATGTAATAGACAAATTTGATAATGCTGTTGTTT-ATTTA 1264
531 AATTATGAAGATCTTATTAATGTAATAGACAAATTTGATAATGCTGTTGTTT-ATTTA 472
1265 TGGTGCAGGTGATATTCAAAATTTACAAAATGTCATATTAGTAATAGGCTGAAGA 1324
471 TGGTGCAGGTGATATTCAAAATTTACAAAATGTCATATTAGTAATAGGCTGAAGA 412

QY 1325 ATGCGTTTAAATATGTTTATATAGAG 1351
Db |||||
411 ATGCGTTTAAATATGTTTATATAGAG 385
Db |||||
RESULT 12
US-08-961-083-115
; Sequence 115, Application US/08961083
; Patent No. 6159469
; GENERAL INFORMATION:
; APPLICANT: Choi et. al.
; TITLE OF INVENTION: Streptococcus pneumoniae Antigens and Vaccines
; NUMBER OF SEQUENCES: 452
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Human Genome Sciences, Inc.
; STREET: 9410 Key West Avenue
; CITY: Rockville
; STATE: Maryland
; COUNTRY: USA
; ZIP: 20850
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.50 inch, 1.4Mb storage
; COMPUTER: HP Vectra 486/33
; OPERATING SYSTEM: MSDOS version 6.2
; SOFTWARE: ASCII Text
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/561,083
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Brookes, A. Anders
; REGISTRATION NUMBER: 36,373
; REFERENCE/DOCKET NUMBER: PB340P2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (301) 303-8504
; TELEFAX: (301) 309-8512
; INFORMATION FOR SEQ ID NO: 115:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1267 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; US-08-961-083-115
Query Match 27.2%; Score 367; DB 3; Length 1267;
Best Local Similarity 58.4%; Pred. No. 1.4e-77;
Matches 719; Conservative 0; Mismatches 500; Indels 12; Gaps 4;
QY 84 GCATGATTAGACATGAAGTTCAGGATCGATATTCAGAACTACGTAATTCAGAAAGT 143
Db |||||
1 GCACACAGATGGGACAAAGGTTGAGGATCAGATGTTGAAAAGTACTACTTACCCACG 60
QY 144 TGCTCTTAGAATAAGGGGATAAATAATACCAATTCGCTAATAACAATAAAGAAGA 203
Db |||||
61 CGGTCTTGAGCAGCAGGAATACCAATTCCTTTGATGAAAATACTAGACGGTGA 120
QY 204 TATGGTATTATACAGGTAATGCAAT--CGCGAGTAGCCATGAAAGAAATAGTACGTGC 260
Db |||||
121 TATGAAATATCGTGGAAATGCGTCTCCAGATAACACGTCGAAATGCGCTATGC 180
QY 261 ACATCAATGAAATAGATGTTGTAAGTATATATATTTTATGACAGATTTATGATCA 320
Db |||||
18: GGACAAAATGATACGACTACAAACGTTTACATGAGTTCTAGGTAGCTTTATCGGTGA 240
QY 321 ATATACTTCAGTAGCTGAACCTGCTGTCACATGCTGTAACCTTACAAACAGGTTTATATC 380
Db |||||
241 CTTTCTTAGCATGGAGTAGCAGGAGCACATGGAATACTTCAACGACAGGTATGTTGTC 300
QY 381 ACATGTTATGATGGTGAATAAAGACTTCATTTTAAATGGTATGGCAGAGGTATGGG 440
Db |||||

Db TCATGTCCTTCTCACAATTACAGATACCAGCTTCTTGATTTGGAGATGGGACAGTCGTGG 360
QY 441 ATTGCTGAAAGTGATTAATTCGCTTTTGAGGCGATGGAATATAGACGTCACTTTTAAAG 500
Db |||||
361 TTGGCCCATGCGCAATATTTTCTTTGATCTGACGAATATGAGCGTCACTTCATGCC 420
QY 501 TTATAAACCTGATTAGCAATTTATGCAATATTTGATTTGATCATCTGATTTATTTCAA 560
Db |||||
421 TTACCACCCAGAAATCTCTATTATCACAACATTTGACTTTGACCATCGAGTATTTTAC 480
QY 561 AGATAATTAATGATGTTTTCATGCTTCCAAAGAAATGGCACATATGTTAAAAAGGTAT 620
Db |||||
481 AGTCTCGAGATGTTTATGCTTTTAAAGCTTTAAGACTATGCGCAACAAATCACCAGGCT 540
QY 621 TATTGCTTGGGGTATGATGAACATCTACGTAAATTTGAAGACAGATGTTTCAATTTATTA 680
Db |||||
541 TTTTGTCTATGTTGAAGATGCTGAATTCGCTAAGATTACGTTCTGATGCGCAATTTATTA 600
QY 681 CTATGATTTTAAAGATTGGG---ATGACATTTATGCTCAAAATATTCAAATTTACGGATA 737
Db |||||
601 TTATGGTTTGAAGCTGAAGGCAATGACTTTGTAGTAGTATCTTCTGTTCAATTAAC 660
QY 738 AGGTACTGCTTTTGTATGTTGATGTTGATGTTGATGTTTATGATCACTTCTCTCTCCACA 797
Db |||||
661 TGGTTCACCTTACCGTTTCAATTCCTGCGCAAACTTGGGCAATTTCCACATTTCCAAC 720
QY 798 ATATGTTGACCATACAGTTTAAATGATTAAGTGTGTTTAAAGTGTGTTTAAAGTGTGTT 857
Db |||||
721 CTTTGGTCTGTCACAAATATCATGATGCGACAGCGCTTATTTGGTCTCTCTTACACAGCAG 780
QY 858 GCTAGATGTTTACAATATTAAGAGCATTAAGAAACGTTTGGTGGTGTAAACGTCGTTT 917
Db |||||
781 ATTGATTTGAACCTTGGTGGTGGAGCACTTGAATTCCTTCCGCTGTTTAAACGTCGTTT 840
QY 918 CAATGAAACTACAATTCGAAATCAAGTTTATTTGATGATTAATGACACCATTCACAGAGA 977
Db |||||
841 CACTGAGAAATTTGCTCAATGATACAGTATTCGATGACTTTGCGCCACCATCCACAGA 900
QY 978 AATTAGTGTACAAATTGACACAGACGAAAGAAATATCCACATAAAGATGTTGTCAGT 1037
Db |||||
901 AATTATTGGGACCTTGGATGGGCTCGTCAGAAATACCCAAAGCAAGAAATTTGTAGCAGT 960
QY 1038 ATTTCAACACACACTTCTCTAGAACACAGCAATTTTAAATGAATTTGCAAGAAAGTTT 1097
Db |||||
961 CTTTCAACCGCATACCTTTACAAGAACCAATTTGCCCTTTTGGACGACTTTGCCCATGCTTT 1020
QY 1098 ATGTAAGCAGATCGTGTATTTCTATGTTGAAATTTTGGCTCAATTAG---AGAAAATTC 1154
Db |||||
1021 AAACCAAGCAGATGCTGTTTATCTAGCGCAATTTATGCTCGCTCGTGAAGTAGATCA 1080
QY 1155 TGGCGCATTAACGATACAGATTTTAAATGATTAAT---TGGAGGTGCTATCGTTCAATTA 1211
Db |||||
1081 TGGTGACCTTAAGGTAGAGACCTAGCCACAAATCAACAAATCAACAAACACCAAGTAGTAC 1140
QY 1212 TGAAGATCTTATTAATGATTTAGACAAATTTGATAATGCTGTTGTTTATTTATGAGTGC 1271
Db |||||
1141 TGTGAAATATGTTCTCCACTCTAGACCATGCAATGCTGTTTACGTTTATGAGGAGC 1200
QY 1272 AGGTGATTTCAAAATTTACAAATGTCATAT 1302
Db 1201 AGGAGACATCCAACTATGATATCTCATTT 1231

RESULT 13

US-09-536-784-115
; Sequence 115, Application US/09536784
; Patent No. 6573082
; GENERAL INFORMATION:
; APPLICANT: Choi et. al.
; TITLE OF INVENTION: Streptococcus pneumoniae Antigens and Vaccines
; NUMBER OF SEQUENCES: 452
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Human Genome Sciences, Inc.

STREET: 9410 Key West Avenue
CITY: Rockville
STATE: Maryland
COUNTRY: USA
ZIP: 2085C
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.4Mb storage
COMPUTER: HP Vectra 486/33
OPERATING SYSTEM: MSDOS version 6.2
SOFTWARE: ASCII Text
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/536,784
FILING DATE: 30-Oct-1997
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/961,083
FILING DATE: OCT-30-1997
ATTORNEY/AGENT INFORMATION:
NAME: Michelle S. Marks
REGISTRATION NUMBER: 41,971
REFERENCE/DOCKET NUMBER: PB340F3
TELECOMMUNICATION INFORMATION:
TELEPHONE: (301) 309-8534
TELEFAX: (301) 309-8512
INFORMATION FOR SEQ ID NO: 115:
SEQUENCE CHARACTERISTICS:
LENGTH: 1267 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
SEQUENCE DESCRIPTION: SEQ ID NO: 115:
US-09-536-784-115

Query Match	27.2%	Score 367;	DB 4;	Length 12677;
Best Local Similarity	58.4%;	Pred. No. 1.4e-77;		
Matches 719;	Conservative	0;	Mismatches 500;	Indels 1

QY	84	GCA	TGATTTTAGGACATCGAAGTTCGAAGATCGGATATTGAGAACCTACGTTATTTTACAGAGT	143
DB	1	GCA	CCAGATGGGCACAAAGGTTCCAGGATTCAGATGTTTGAAGAAGTACTACTTTACCCAAAG	60
QY	144	TGCTCTTAGAAATAAGGGGATAAABAATATACCAATTTGGTGCTAATTAACATAAAAGAAGA	203	
DB	61	CGGTCTTAGACAGCGCGAATTAACATTCCTCTTTGATGAAAAAATCTAGACGGTGA	120	
QY	204	TATCGTAGTTATACAAGTAATGCATT---CGCGAGTAGCCATCAAGAGAAATAGTACGTGC	260	
DB	121	TATCGGAAATATCCGCTGGAAATGCTTTTCGTCAGATAACAACGTCGAAATTCGCTATGC	180	
QY	261	ACATCAATTTGAAATAGATGTTGTAAGTTATAATGATTTTITAGGACAGATATTGATCA	320	
DB	181	GGACCAAAATGGTATCATCTACAAACGTTACCATGAGTTTCTAGTAGCTTTATGCGTGA	240	
QY	321	ATATACTTCAGTAGCTGCTAACTGGTGACATGGTAAAACTCTCAACACAGCTTTATTATC	380	
DB	241	CTTTGTTAGCATGGAGTAGCAGGAGCACATGAAAACTTCAACCAAGGTAATGTTCTC	300	
QY	381	ACATGTTATGAATGGTGATAAAAAGACATCTCAATTTTAAATGGTGATGSCACAGGTATCGG	440	
DB	301	TCATGTCCTTGCTCACATTACAGATACCAGCTCTCTTGATTTGGAGATGGACAGGTCTGG	360	
QY	441	ATTGCCTGAAAGTGATTATTTGGCTTTTGGAGCATGTGAATATAGACGTCACTTTTAAAG	500	
DB	361	TTCGGCCAATGCCAAATATTTGCTTTTGATCTGACGAATAAGACGGTCACTTCATGCC	420	
QY	501	TTATAAACCTGATTACGCNAATTATGACAAATTTGATTCGATCATCCTGATTATTTCAA	560	
DB	421	TTACCACCAGAAATACTCTATTATCACCAACATTCGACTTTGACCATCCAGATTATTTCAC	480	
QY	561	AGATATTATGATGTTTTTGATGCAATCCAGAAATGGCACATAATGTTTAAAAAAGGAT	620	
DB	481	AAGTCTCGAGGATGTTTAAATGTCCTTTAACGCTATGCACTATGCAACAACAAATCCACAGGGTCT	540	

Qy	621	TATTTGCTTGGGTGATGATCAACATCTACGTAAAAATTGAAGCAGAGATGTTCCAAATTATTATA	680
Db	541	TTTTTGTCTATGGTGAAGATGCTGTAATTCGGTAAGATTACGTTCTGAUGCACCAAATTTATTA	600
Qy	681	CTATGGATTTAAAGATTTCGG---ATGACATTTATGCTCAAAATATTTCAAAATTTACGGATAA	737
Db	601	TTATGGTTTTGAAGCTGAAGGCAATGACTTTGTAGCTAGTAGTAATCTCTTCGTTCATATAC	660
Qy	738	AGTACTGCTTTTGATGTGTATGTTGGATCGGTAGTTTATGATCTCACTTCCTCTCTCCACA	797
Db	661	TGGTTCACACTTCACCGTTCAATTTCCGTGGAACAAACTTGGGCGCAATCCACATTTCCAAC	720
Qy	798	ATATGGTGACATACACAGTTTTAAATGCATTTAGCTGTAATTTGGCATTTATTATTAGAA	857
Db	721	CTTTGGTTCGTCACAATATCATGAATCGACAGCGTTAATGGTCTCTCTTTACACAGCAGS	780
Qy	858	GCTAGATGTTACAAATATTAAGAAGCATTTAGAAAGCTTTGGTGGTGTATTAAGCTCGTTT	917
Db	781	ATTTGATTTGAACCTTGGTGGTGCAGCACATTTGAAAACATTTTCCGGTGTTAACGTCGTTT	840
Qy	918	CAATGAACATCAATTCGCAATCAAGTTATCTGTAGATGAATATGACACCATCCCAAGAGA	977
Db	841	CACGTGAGAAATTTGTCATCATATACATGATATATCGATGACTTTTGCCACCATCCCAACAGA	930
Qy	978	AATTAGTGTCTACAATTCACACAGCAGAAAGAAATATCCACATAAGAGATTTGTTGCACT	1037
Db	901	AATTATTGGCACTTTGGATCGGCTCGTCAGAAATATCCCAAGCANGAGAAATTTGACRG	960
Qy	1038	ATTTCAACACACACACTTCTCTAGAACACACAGCATTTTAAATGAATTTGCAGAAAAGTTT	1097
Db	961	CTTTCAACCGCATACCTTTTCAAGAACATTTGCTTTGTGGACGACTTTGCCCATGCTTT	1020
Qy	1098	ATGTAAGCAGATCGTGTAATCTTATCTGAAATTTTGGTCCAAATAG---AGAAATTC	1154
Db	1021	AAACCAACAGATGCTGTTTATCTAGCGCAAAATTTATGGCTCGCTCGTGAAGTAGATCA	1080
Qy	1155	TGGCGCATTAACGATACAAGATTTAATTGATAAAT---TGGAGTGCATCGTTTCATTA	1211
Db	1081	TGGTGACGTTAAGGTAGAAGACCTTAGCCACAAATTCACAAAMAACCAAGTGATTAC	1140
Qy	1212	TGAAGATCTTATTAAATGATTAGAACAAATTTGATAATGCTGTGTTGTTTNTTTATGGGTGC	1271
Db	1141	TGTTGAAATGTTTCTCCATCTCTAGACCATGACAAATGCTGTTTACGCTTTATGGGAGC	1200
Qy	1272	AGGTGATATTCAAAATTTACAAATGCAAT	1302
Db	1201	AGGAGACATCCAAACCTATGATGATCTCAATTT	1231

RESULT 14

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PRIOR APPLICATION DATA:	
APPLICATION NUMBER:	60/C85,598
FILING DATE:	14 May 1998
APPLICATION NUMBER:	60/051571
FILING DATE:	July 2, 1997
ATTORNEY/AGENT INFORMATION:	
NAME:	Ariniello, Pamela Deneke
REGISTRATION NUMBER:	42,489
REFERENCE/DOCKET NUMBER:	GTC-012
TELECOMMUNICATION INFORMATION:	
TELEPHONE:	(781)893-5007
TELEFAX:	(781)893-8277
INFORMATION FOR SEQ ID NO: 3260:	
SEQUENCE CHARACTERISTICS:	
LENGTH:	873 base pairs
TYPE:	nucleic acid
STRANDEDNESS:	double
TOPOLOGY:	circular
MOLECULE TYPE: DNA (genomic)	
HYPOTHETICAL: NO	
ANTI-SENSE: NO	
ORIGINAL SOURCE:	
ORGANISM:	Enterococcus faecium
FEATURE:	
NAME/KEY:	misc feature
LOCATION:	(B) LOCATION 1...873
SEQUENCE DESCRIPTION: SEQ ID NO: 3260:	
US-09-107-532A-3260	
Query Match 26.0%; Score 350.8; DB 4; Length 873;	
Best Local Similarity 62.8%; Pred. No. 8,4e-74;	
Matches 544; Conservative 0; Mismatches 322; Indels 0; Gaps 0;	
QY	1 ATGAGTAAGAGATTTATATATACACACATCATCATTTTGTGCGAATTAAGGTTCTGGC 60
DB	7 AGGATTCAAATGGAAATCAAAATAAATTTGTATCATTTTGTGTATCAAAAGGTTCAAGGA 66
QY	61 ATGAGTTCATTAGCACAAATCATCATGTTTAGACATGAAGTTCAGGATCGGATATT 120
DB	67 ATGAGTCCCTTGGCTCTGTTTACATGACCAAGTCTAATGTCGAAGATCAGACATT 126
QY	121 GAGAACTACGATTTTACAGAGTGTGCTTTAGAAATAAGGGGTAATAATTAACCATTT 180
DB	127 GAAATAATTTCTTTACAAAGAGATTAGAAAGACAAATATACGATTTCTGCCATTT 186
QY	181 GGTGCTAATACATAAAGAGATATGATGTTATACAGAGTAATGATTCGCGAGTACG 240
DB	187 AACCGATATATGTAACACCGGATGACATCATTCGAGGAATGCAATTTCTTGATCA 246
QY	241 CATGAAGAAATAGTACGTGCATCAATTTGAAATTAGATGTTGTAAGTTATAATGATTT 300
DB	247 CATGAAGAAATCCAGCGAGCAAAAGATTTAGGTTTGAAGTGAATTCGCTATCAGCATTT 306
QY	301 TTAGACAGATTTATGATCAATATACITTCAGTAGCTGTAACTGGTGACATGGTAACCT 360
DB	307 ATTGGTCAATTTTATCCAAATTTATACAGAGTATCGCTGTAAACAGGCTCTCAGGAAACA 366
QY	361 TCTACACAGGTTTATATCATGTTATGATGTTGATGATAAAGACATTCATTTTAATT 420
DB	367 AGTACGACTGCACTCTCTCATGTTATGTTGTTGCTGCGTCCAAAGTATATCAATT 426
QY	421 GGTGATGCGACAGGTATGGGATGCTGAAAGTGAATTTTTCGCTTTTGAAGCATGTGAA 480
DB	427 GGAGATGNAACAGGATGGTGTATCCGCAAGCGGAATTCCTTTCAATTTGAGGCGCTGTGAA 486
QY	481 TATAGACGTCACTTTTATAGTTATTAACCTGATTAACGCAATATACAAATATGATTC 540
DB	487 TATCGCGCTCAATTCCTTGCCTATTTCACACAGTATGCAATCATGACCAATATCGATTT 546
QY	541 GATCATCTGATTTTCAAGATATTAATGATGTTTGTGATGTTTGTGATTCACAGAAATGCA 600
DB	547 GATCATCGGATTTATATACAAAGTATCGAGATGATTTTACAGCTTTTCCAAACATGGCT 606
RESULT 15	
US-08-940-572-3/C	
Sequence 3, Application US/08940572	
Patent No. 6310193	
GENERAL INFORMATION:	
APPLICANT: Wallis, Nicola G.	
APPLICANT: Black, Michael T.	
APPLICANT: Hodgson, John E.	
APPLICANT: Knowles, David J.	
APPLICANT: Lonetto, Michael A.	
APPLICANT: Nicholas, Richard O.	
APPLICANT: Stodola, Robert K.	
TITLE OF INVENTION: No. 6310193el MurC	
NUMBER OF SEQUENCES: 6	
CORRESPONDENCE ADDRESS:	
ADDRESSEE: Dechert, Price & Rhoads	
STREET: 4000 Bell Atlantic Tower, 1717 Arch Stre	
CITY: Philadelphia	
STATE: PA	
COUNTRY: USA	
ZIP: 19103-2793	
COMPUTER READABLE FORM:	
MEDIUM TYPE: Diskette	
COMPUTER: IBM Compatible	
OPERATING SYSTEM: DOS	
SOFTWARE: FastSeq for Windows Version 2.0	
CURRENT APPLICATION DATA:	
APPLICATION NUMBER: US/08/940,572	
FILING DATE:	
CLASSIFICATION: 536	
PRIOR APPLICATION DATA:	
APPLICATION NUMBER: US 60/024022	
FILING DATE: 16-AUG-1996	
APPLICATION NUMBER: US 08/889711	
FILING DATE: 08-JUL-1997	
ATTORNEY/AGENT INFORMATION:	
NAME: Dickinson, Q. Todd	
REGISTRATION NUMBER: 28,354	
REFERENCE/DOCKET NUMBER: P50533-04	
TELECOMMUNICATION INFORMATION:	
TELEPHONE: 215/994-2252	
TELEFAX: 215/994-2222	
TELEX:	
INFORMATION FOR SEQ ID NO: 3:	
SEQUENCE CHARACTERISTICS:	
LENGTH: 1825 base pairs	
TYPE: nucleic acid	
STRANDEDNESS: double	
TOPOLOGY: linear	
US-08-940-572-3	
Query Match 22.9%; Score 308.8; DB 4; Length 1825;	

Best Local Similarity 58.9%; Pred. No. 8.6e-64;		Db		777 ACTCAATT 770	
Matches 606; Conservative 0; Mismatches 412; Indels 10; Gaps 4;					
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QY	345 TGCACATGGTAAATCTTACACACAGCTTTATATACATGTTATGATGGTGATAAAAA 404				
Db	1737 AGCACATGGAATACTTCAACAGCAGGTATGTCTCATGTCTTGTCTCACTTACAGA 1678				
QY	405 GACTTCATTTTAAATGGTGATGGCACAGGTATGGGATGCGCTGAAAGTGATTTTTCG 464				
Db	1677 TACGAGCTTCTGATGGAGATGGGACAGGTCTGTGTTGCGCAATGCCAAATATTTGT 1618				
QY	465 TTTTGAGCATGTGAATATAGACGTCACCTTTTAAAGTTATAAACCTGATAGCAATAT 524				
Db	1617 CTTTCAATCTGACGAATATGAGGTCACTTCATGCTTACCACCCAGATACTCTATTAT 1558				
QY	525 GACAAATATTGATTCGATCATCTGATTTATTTCAAAGATATTATGATGTTTTCGATGC 584				
Db	1557 CACCAACATGACTTTGACATCCAGATTATTTCACMAGTCTCGAGGATGTTTCAATGC 1498				
QY	585 ATTCAGAAATGGCACATAATGTTTAAAAAGSTATTATTGCTTGGGGTGATGATGAACA 644				
Db	1497 CTTTAACGACTATGCCAAACAATTACGATGGTCTTTTGTCTATGTTGAAGATGCTGA 1438				
QY	645 TCTAGCTAAATGAAGCAGATGTTCCAAATTTATTTACTATGAA--TTAAAGATTGG--A 701				
Db	1437 ATTGGTAAATATACGTCCTGATGACCAATTTATTATTATGTTTGAAGCTGAAGGCAA 1378				
QY	702 TGACATTTATGCTCAAAATATTCAAATTTAGGATRAAGGTACTGCTTTTGTGTTATGT 761				
Db	1377 TGACTTTTGTAGTAGTATCTTCTCGTTCACAACTGGTTCAACCTTCACCGTTCAATT 1318				
QY	762 GGATGCTGAGTTTATGATCACTTCCTGCTCCACAATATGCTGACCACTACAGT--TTTAA 821				
Db	1317 CCGTGACAAACTTGGGCAATTCACATTCACACTTGGTCTGTCACAAATATCATGA 1258				
QY	822 TGCAATGCTGTAATTCGCAATTTAGTTATTTAGAGAGCTAGATGTTTACAAATATTAAAG 881				
Db	1257 TGGACAGCCGTTATTGGTCTTCTTTACACAGCAGGATTTGAT--TGAACCTTGGTGGTGA 1198				
QY	882 ASCATTAGAAACGTTTGGTGGTCTTAAACCTGCTTTCAATGAAACTACAAATTCGAAATCA 941				
Db	1197 GCACCTTGAATAACATTTGCCGGTGTAAACGCTGTTTCTGAGAAATTTGTCATGATC 1138				
QY	942 AGTTATTGTAGATGATTATGACACCATCCAGAGAAATTTAGTGTACAAATTCACACAGC 1001				
Db	1137 AGTGATTTATTGATGACTTTTGGCCATCATCCACAGAAATTTATGCGACCTTGGATGGGC 1078				
QY	1002 ACGAAGAAATATCCACATAAAGATGTTGTCAG--TATTTCAACCCACACACTTCTCTA 1060				
Db	1077 TCGTCAGAAATACCCAGCAAGAAATTTAGCAGTTCTTTCCACCGCATACCTTTTACAA 1018				
QY	1061 GAACACAGCATTTTAAATGAATTTGCGAAGATTTTACGTAAGCAGATCGTGATTTCT 1120				
Db	1017 GAACCAATGCCCCTGTTGGACGACTTTGCCCATGCTTTTAAACCAAGCAGATGCTGTTTATC 958				
QY	1121 TATGTGAAATTTTGGCTCAATTAG---AGAAATCTGGCGCATTAACGATACAGATT 1177				
Db	957 TAGCGCAATTTATGCTCGGCTCGTGAAGTAGATCATGGTAGCTTAAAGTAGAGACC 898				
QY	1178 TAATTGATAAAT---TGGAGGTGCATCGTTTCAATTAAGATCTTATTAAATGTTATAG 1234				
Db	897 TAGCCATAAATAACAAAAAACCAACCAAGTGATTACTGTTGAAATGTTTCTCCACTCC 838				
QY	1235 AACAAATTTGATGCTGTTGTTTATTATTTGGGTGAGGTGATTTCAAAAAATTACAA 1294				
Db	837 TAGACCAATGACATGCTGTTTACGTTTATGGGACGAGGACATCCAAACCTATGAT 778				
QY	1295 ATGCATAT 1302				

Search completed: June 25, 2004, 20:27:01
Cob time : 118 secs

Mon Jun 28 09:30:48 2004

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: June 25, 2004, 19:30:57 ; Search time 631 Seconds
(without alignments)
9808.323 Million cell updates/sec

US-09-103-287-1

Perfect score: 1351
Sequence: 1 atgagtaagaggtttatat.....ttaatatgtttataatagag 1351

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 3017426 seqs, 2290544650 residues

Total number of hits satisfying chosen parameters: 6034852

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications NA: *

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- 2: /cgn2_6/ptodata/1/pubna/PCT_NEW_PUB.seq.*
- 3: /cgn2_6/ptodata/1/pubna/US06_NEW_PUB.seq.*
- 4: /cgn2_6/ptodata/1/pubna/US06_PUBCOMB.seq.*
- 5: /cgn2_6/ptodata/1/pubna/US07_NEW_PUB.seq.*
- 6: /cgn2_6/ptodata/1/pubna/US07_PUBCOMB.seq.*
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- 10: /cgn2_6/ptodata/1/pubna/US09B_PUBCOMB.seq.*
- 11: /cgn2_6/ptodata/1/pubna/US09C_PUBCOMB.seq.*
- 12: /cgn2_6/ptodata/1/pubna/US09_NEW_PUB.seq.*
- 13: /cgn2_6/ptodata/1/pubna/US10A_PUBCOMB.seq.*
- 14: /cgn2_6/ptodata/1/pubna/US10B_PUBCOMB.seq.*
- 15: /cgn2_6/ptodata/1/pubna/US10C_PUBCOMB.seq.*
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- 18: /cgn2_6/ptodata/1/pubna/US60_NEW_PUB.seq.*
- 19: /cgn2_6/ptodata/1/pubna/US60_PUBCOMB.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	ID	Description
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2	1330.2	98.5	2424	13	US-10-329-624-392
3	1319	97.6	1315	9	US-09-815-242-8195
4	1296.4	96.0	1314	13	US-10-282-122A-7596
5	1295	95.9	1311	9	US-09-815-242-4242
6	1293.2	95.7	1318	9	US-09-925-637-1
7	1293.2	95.7	1318	15	US-10-084-205-1
8	1293.2	95.7	1318	17	US-10-712-713-1
9	906.2	67.1	1311	13	US-10-282-122A-34994
10	599.2	44.4	619	9	US-09-939-980-179
11	589.6	43.6	1308	13	US-10-282-122A-10147
12	553.4	41.0	1371	9	US-09-815-242-6773
13	551.8	40.8	1335	13	US-10-282-122A-21122
14	531.2	39.3	3011208	16	US-10-398-221-2058

15	524	38.8	495269	16	US-10-398-221-8
16	516.4	38.2	1344	13	US-10-282-122A-24804
17	513	38.0	1332	13	US-10-282-122A-21467
18	490	36.3	738	13	US-10-282-122A-35131
19	444.6	32.9	1329	13	US-10-282-122A-38211
20	424.6	31.4	1328	13	US-10-282-122A-35995
21	399.2	29.5	1335	9	US-09-815-242-9409
22	399.2	29.5	1335	13	US-10-282-122A-37889
23	397.6	29.4	11864	13	US-10-158-844-61
24	367	27.2	1267	9	US-09-765-272-115
25	335	24.8	951	9	US-09-974-300-6133
26	316.4	23.4	4956	9	US-09-070-927A-291
27	314.8	23.3	677	9	US-09-070-927A-780
28	303.4	22.5	1451	16	US-10-398-221-3296
29	255.4	18.9	257	9	US-09-815-242-2928
30	255.4	18.9	257	13	US-10-282-122A-5503
31	237.2	17.6	897	16	US-10-398-221-1299
32	225	16.7	225	9	US-09-815-242-1571
33	225	16.7	225	9	US-09-815-242-1599
34	225	16.7	225	9	US-09-815-242-1631
35	225	16.7	225	9	US-09-815-242-1637
36	225	16.7	225	13	US-10-282-122A-4091
37	225	16.7	225	13	US-10-282-122A-4131
38	225	16.7	225	13	US-10-282-122A-4174
39	225	16.7	225	13	US-10-282-122A-4178
40	204.4	15.1	206	9	US-09-815-242-1416
41	204.4	15.1	206	13	US-10-282-122A-3941
42	203	15.0	227	13	US-10-282-122A-4100
43	158	11.7	158	9	US-09-815-242-3575
44	158	11.7	158	9	US-09-815-242-3615
45	158	11.7	158	13	US-10-282-122A-6150

ALIGNMENTS

RESULT 1

US-08-781-986A-392
Sequence 392, Application US/08781986A
Publication No. US20030054436A1

GENERAL INFORMATION:

APPLICANT: Charles Kunsch
TITLE OF INVENTION: Staphylococcus aureus Polynucleotides and Sequences
NUMBER OF SEQUENCES: 5255
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Human Genome Sciences, Inc.
STREET: 9410 Key West Avenue
CITY: Rockville
STATE: Maryland
COUNTRY: USA
ZIP: 20850

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette, 3.50 inch, 1.4mb storage
COMPUTER: HP Vectra 486/33
OPERATING SYSTEM: MSDOS version 6.2
SOFTWARE: ASCII Text

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/781,986A

FILING DATE:

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER:

FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: Berson, Bob

REGISTRATION NUMBER: 30,446

REFERENCE/DOCKET NUMBER: PB248PP

TELECOMMUNICATION INFORMATION:

TELEPHONE: (301) 309-8504

TELEFAX: (301) 309-8512

INFORMATION FOR SEQ ID NO: 392:

SEQUENCE CHARACTERISTICS:

LENGTH: 2424 base pairs

[illegible]

		LENGTH: 2424 base pairs		Query Match		98.5%; Score 1330.2; DB 13; Length 2424;	
		TYPE: nucleic acid		Best Local Similarity		99.0%; Pred. No. 1e-229;	
		STRANDEDNESS: double		Matches 1338; Conservative		0; Mismatches 13; Indels 0; Gaps 0;	
		TOPOLOGY: linear					
		SEQUENCE DESCRIPTION: SEQ ID NO: 392;					
		OS-10-329-624-392					
QY	1	ATGAGTAAAGGAGTTTATATAAGTACACACTATCACTTTGTCGGAAATTAAGGTTCTGGC	60	QY	1506	GGGTAAAGCTCGTTTCAATGAACACACAAATGCAATCAAGTATTGTAGATGATTAT	1565
DB	606	ATGAGTAAAGGAGTTTATATAAGTACACACTATCACTTTGTCGGAAATTAAGGTTCTGGC	665	QY	961	GCACACCATCCAGAGAGAAATAGTGTCTACAAATGACACAGACGAAAGAAATATCCACAT	1020
QY	61	ATGAGTTCATTAGCACAAATCATGCATGATTTAGGACATGAAGTTCAAGATCGGATATT	120	DB	1566	GCACACCATCCAGAGAGAAATAGTGTCTACAAATGAAACAGCAGCAAGAAATATCCACAT	1625
DB	666	ATGAGTTCATTAGCACAAATCATGCATGATTTAGGACATGAAGTTCAAGATCGGATATT	725	QY	1021	AAAGAGTGTGTCAGTATTTCAACACACACACTTTCTCTAGAACACACAGCACTTTTAAAT	1080
QY	121	GAGAACTACGTTTACAGAGTTGCTCTTAGAAATAGGGATAGAAATATACCAATTT	180	DB	1626	AAAGAGTGTGTCAGTATTTCAACACACACACTTTCTCTAGAACACACAGCACTTTTAAAT	1685
DB	726	GAGAACTACGTTTACAGAGTTGCTCTTAGAAATAGGGATAGAAATATACCAATTT	785	QY	1081	GAATTTGCAGAAAGTTTATGCTTAAAGCAGATCGTGATCTCTTATGTAATTTTGGCTCA	1140
QY	181	GGTCTTAATACATATAGAAAGATATGCTAGTTATACAAAGTATGATTCGCGAGTAGC	240	DB	1686	GAATTTGCAGAAAGTTTATGCTTAAAGCAGATCGTGATCTCTTATGTAATTTTGGCTCA	1745
DB	786	GATGCTTAATACATATAGAAAGATATGCTAGTTATACAAAGTATGATTCGCGAGTAGC	845	QY	1141	ATTAGAGAAATTTCTGGCGCATTAACGATACAAATTAATTAATTAATTAATTAATTAAT	1200
QY	241	CATGAAGAAATAGTACGTGCACATCAATGAAATAGATGTGTAAAGTTATATGATTTT	300	DB	1746	ATTAGAGAAATTTCTGGCGCATTAACGATACAAATTAATTAATTAATTAATTAATTAAT	1805
DB	846	CATGAAGAAATAGTACGTGCACATCAATGAAATAGATGTGTAAAGTTATATGATTTT	905	QY	1201	TCGTTTCAATTAAGAGATCTTATTAATGATTTAGACAAATTTGATATGCTGTGTTTAA	1260
QY	301	TTAGGACAGATTATGATCAATATATCTACGTAGTCTAAGTGTGCAATGTAATAACT	360	DB	1806	TCGTTTCAATTAAGAGATCTTATTAATGATTTAGACAAATTTGATATGCTGTGTTTAA	1865
DB	906	TTAGGACAGATTATGATCAATATATCTACGTAGTCTAAGTGTGCAATGTAATAACT	965	QY	1261	TTTATGGGTGCGAGTGATTTCAAAAATTAACAAATGCAATTTTATAGATAAATAGGCATG	1320
QY	361	TCTACACAGCTTTATATACATGTTATGATGTTGATGATGATGATGATGATGATGATG	420	DB	1866	TTTATGGGTGCGAGTGATTTCAAAAATTAACAAATGCAATTTTATAGATAAATAGGCATG	1925
DB	966	TCTACACAGCTTTATATACATGTTATGATGTTGATGATGATGATGATGATGATGATG	1025	RESULT 3			
QY	421	GCTGATGTCACAGGTATGGGATTTGCTGAAATGATTTTGGCTTTTGGAGCATGTGAA	480	US-09-815-242-8195			
DB	1026	GCTGATGTCACAGGTATGGGATTTGCTGAAATGATTTTGGCTTTTGGAGCATGTGAA	1085	; Sequence 8195, Application US/09815242			
QY	481	TATAGACGTCACTTTTAAAGTTTAAACCTGATGCAATTAACACAAATTAATTCATTTT	540	; Patent No. US20020061569A1			
DB	1086	TATAGACGTCACTTTTAAAGTTTAAACCTGATGCAATTAACACAAATTAATTCATTTT	1145	; GENERAL INFORMATION:			
QY	541	GATCATCTCTGATTTTCAAGATATTAATGATGTTTGTGATGATTTCCAGAAATGGCA	600	; APPLICANT: Haselbeck, Robert			
DB	1146	GATCATCTCTGATTTTCAAGATATTAATGATGTTTGTGATGATTTCCAGAAATGGCA	1205	; APPLICANT: Ohlsen, Kari L.			
QY	601	CATAATGTTTAAAAAGGTATTATGCTGGGGTGATGATGAACATCTAGTAAATTTGAA	660	; APPLICANT: Zyskind, Judith W.			
DB	1206	CATAATGTTTAAAAAGGTATTATGCTGGGGTGATGATGAACATCTAGTAAATTTGAA	1265	; APPLICANT: Wall, Daniel			
QY	661	GCAGATGTTCCAAATTTATCTATGATTTAAAGATTCGATGACATTTATGCTCAAAAT	720	; APPLICANT: Trawick, John D.			
DB	1266	GCAGATGTTCCAAATTTATGATTTAAAGATTCGATGACATTTATGCTCAAAAT	1325	; APPLICANT: Yamamoto, Robert T.			
QY	721	ATTCAAATTAACGATTAAGGTATGCTTTTGTGATGATGATGATGATGATGATGATGAT	780	; APPLICANT: Xu, H. Howard			
DB	1326	ATTCAAATTAACGATTAAGGTATGCTTTTGTGATGATGATGATGATGATGATGATGAT	1385	; TITLE OF INVENTION: Identification of Essential Genes in			
QY	781	CACCTTCTCTCCCAAAATAGTGACCAATACAGTTTAAATGCAATGCTGTAATTCGG	840	; TITLE OF INVENTION: Prokaryotes			
DB	1386	CACCTTCTCTCCCAAAATAGTGACCAATACAGTTTAAATGCAATGCTGTAATTCGG	1445	; FILE REFERENCE: ELITRA-011A			
QY	841	ATTAGTATTATAGAGAGCTAGATGTTACAAATATTAAAGACGNTAGAAAGCTTTGGT	900	; CURRENT APPLICATION NUMBER: US/09/815,242			
DB	1446	ATTAGTATTATAGAGAGCTAGATGTTACAAATATTAAAGACGNTAGAAAGCTTTGGT	1505	; PRIOR FILING DATE: 2001-03-21			
QY	901	GGTGTAAAGCTGTTTCAATGAACCTACAAATGCAATTTAGTATGATGATTTAT	960	; PRIOR APPLICATION NUMBER: 60/191,078			
				; PRIOR FILING DATE: 2000-03-21			
				; PRIOR APPLICATION NUMBER: 60/206,848			
				; PRIOR FILING DATE: 2000-05-23			
				; PRIOR APPLICATION NUMBER: 60/207,727			
				; PRIOR FILING DATE: 2000-05-26			
				; PRIOR APPLICATION NUMBER: 60/242,578			
				; PRIOR FILING DATE: 2000-10-23			
				; PRIOR APPLICATION NUMBER: 60/253,625			
				; PRIOR FILING DATE: 2000-11-27			
				; PRIOR APPLICATION NUMBER: 60/257,931			
				; PRIOR FILING DATE: 2000-12-22			
				; PRIOR APPLICATION NUMBER: 60/269,308			
				; PRIOR FILING DATE: 2001-02-16			
				; NUMBER OF SEQ ID NOS: 14110			
				; SOFTWARE: PastSeq for Windows Version 4.0			
				; SEQ ID NO 8195			
				; LENGTH: 1335			
				; TYPE: DNA			
				; ORGANISM: Staphylococcus aureus			
				; FEATURE:			
				; NAME/KEY: CDS			
				; LOCATION: (1)...(1335)			
				US-09-815-242-8195			

Query Match		97.6%	Score 1319;	DB 9;	Length 1335;
Best Local Similarity		99.3%	Pred. No. 8.4e-228;		
Matches 1325;		Conservative 0;	Mismatches 10;	Indels 0;	Gaps 0;
Qy	1	ATGAGTAAAGGAGTTTATATATAGACACACACTATCTTTGTCGGAATTAAGGTTCTCGC	60		
Db	1	ATGAGTAAAGGAGTTTATATATAGACACACACTATCTTTGTCGGAATTAAGGTTCTCGC	60		
Qy	61	ATGAGTTCATTAGACACAAATCATGCAATGATTAGACATGAAGTTCAAGGATCGGATATT	120		
Db	61	ATGAGTTCATTAGACACAAATCATGCAATGATTAGACATGAAGTTCAAGGATCGGATATT	120		
Qy	121	GAGAACTACGTTATTTACAGAACTGCTCTTGAGAAATTAAGGGATATAATATACCAATT	180		
Db	121	GAGAACTACGTTATTTACAGAACTGCTCTTGAGAAATTAAGGGATATAATATACCAATT	180		
Qy	181	GGTGCTAATAACATAAAGACGATATGGTAGTTATACAAAGTAATGCAATTCGCGAGTAGC	240		
Db	181	GGTGCTAATAACATAAAGACGATATGGTAGTTATACAAAGTAATGCAATTCGCGAGTAGC	240		
Qy	241	CATGAAGAAATAGTACGTGCACATCAATGAAATTAGATGTTGTAAGTTATATGATTTT	300		
Db	241	CATGAAGAAATAGTACGTGCACATCAATGAAATTAGATGTTGTAAGTTATATGATTTT	300		
Qy	301	TTAGGACAGATTTATGATCAATATATCTTCAGTAGCTGTAACTGGTGCCACATGGTAAACT	360		
Db	301	TTAGGACAGATTTATGATCAATATATCTTCAGTAGCTGTAACTGGTGCCACATGGTAAACT	360		
Qy	361	TCACAAAGGTTTATATCAATGTTATGATGGTATGATGATGATGATGATGATGATGATG	420		
Db	361	TCACAAAGGTTTATATCAATGTTATGATGGTATGATGATGATGATGATGATGATGATG	420		
Qy	421	CGTGATGACACAGGATGGGATGCTCGGAGAGTATTTTCGCTTTGAGGCAATGGA	480		
Db	421	CGTGATGACACAGGATGGGATGCTCGGAGAGTATTTTCGCTTTGAGGCAATGGA	480		
Qy	481	TATAGACGTCACTTTTAAAGGATTTATGCTGGGGTATGATGAAATGATGATGATGATG	540		
Db	481	TATAGACGTCACTTTTAAAGGATTTATGCTGGGGTATGATGAAATGATGATGATGATG	540		
Qy	541	GATCATCTCGATTTTCAAGATATTTAATGATGTTTTCGATCAATTCAGAAATGGCA	600		
Db	541	GATCATCTCGATTTTCAAGATATTTAATGATGTTTTCGATCAATTCAGAAATGGCA	600		
Qy	601	CATAATGTTTAAAGGATTTATGCTGGGGTATGATGAAATGATGATGATGATGATGATG	660		
Db	601	CATAATGTTTAAAGGATTTATGCTGGGGTATGATGAAATGATGATGATGATGATGATG	660		
Qy	661	GCAGATGTTCCAAATTTATGATGATGATGATGATGATGATGATGATGATGATGATGATG	720		
Db	661	GCAGATGTTCCAAATTTATGATGATGATGATGATGATGATGATGATGATGATGATGATG	720		
Qy	721	ATTCAAATTCAGGATTAAGGATGATGATGATGATGATGATGATGATGATGATGATGATG	780		
Db	721	ATTCAAATTCAGGATTAAGGATGATGATGATGATGATGATGATGATGATGATGATGATG	780		
Qy	781	CACCTTCCTGCTCCCAATATGATGATGATGATGATGATGATGATGATGATGATGATGATG	840		
Db	781	CACCTTCCTGCTCCCAATATGATGATGATGATGATGATGATGATGATGATGATGATGATG	840		
Qy	841	ATTAGTATTTAGGAGCTAGATGATGATGATGATGATGATGATGATGATGATGATGATGATG	900		
Db	841	ATTAGTATTTAGGAGCTAGATGATGATGATGATGATGATGATGATGATGATGATGATGATG	900		
Qy	901	GGTGTTAAACGTCGTTTCAATGAACTACAAATGCAATTCGAAATCAAGTTATGATGAT	960		
Db	901	GGTGTTAAACGTCGTTTCAATGAACTACAAATGCAATTCGAAATCAAGTTATGATGAT	960		
Qy	961	GCACACCATCAAGAGAAATTTAGTGTCAATTTGACACAGCAGCAAGAAATATCCACAT	1020		
Db	961	GCACACCATCAAGAGAAATTTAGTGTCAATTTGACACAGCAGCAAGAAATATCCACAT	1020		

1021

AAAGAGTGTGTTCAGTATTTCAACACACACTTTCTCTAGAACACAGCATTTTAAAT

1080

1021

AAAGAGTGTGTTCAGTATTTCAACACACACTTTCTCTAGAACACAGCATTTTAAAT

1080

1081

GAAATTGACAGAAAGTTTATGTAAGACAGATCGTGATTTCTTATGTAAGTGAATTTTGGCTCA

1140

1081

GAAATTGACAGAAAGTTTATGTAAGACAGATCGTGATTTCTTATGTAAGTGAATTTTGGCTCA

1140

1141

ATTAGAGAAATTTCTGGGCAATTAAACGATACAGATTTAAATTTGATAAAATTCAGAGTGCA

1200

1141

ATTAGAGAAATTTCTGGGCAATTAAACGATACAGATTTAAATTTGATAAAATTCAGAGTGCA

1200

1201

TCGTTTCATTAAATGAAGATCTTAAATGATTAATAGTAACAAATTTGATATGCTGTTGTTTA

1260

1201

TCGTTTCATTAAATGAAGATCTTAAATGATTAATAGTAACAAATTTGATATGCTGTTGTTTA

1260

1261

TTTATGGGTGCGAGTGATTTCAAAATTTACAAATGCAATTTAGATAAATTAGGCATG

1320

1261

TTTATGGGTGCGAGTGATTTCAAAATTTACAAATGCAATTTAGATAAATTAGGCATG

1320

1321

AAAAATGCGTTTAA

1335

1321

AAAAATGCGTTTAA

1335

RESULT 4

US-10-282-122A-7596

Sequence 7596, Application US/10282122A

Publication No. US20040029129A1

GENERAL INFORMATION:

APPLICANT: Wang, Liangsu

APPLICANT: Zamudio, Carlos

APPLICANT: Malone, Cheryl

APPLICANT: Haselbeck, Robert

APPLICANT: Ohlsen, Kari

APPLICANT: Zyskind, Judith

APPLICANT: Wall, Daniel

APPLICANT: Trawick, John

APPLICANT: Carr, Grant

APPLICANT: Yamamoto, Robert

APPLICANT: Forsyth, R.

APPLICANT: Xu, H.

TITLE OF INVENTION: Identification of Essential Genes in Microorganisms

FILE REFERENCE: BLITRA.034A

CURRENT APPLICATION NUMBER: US/10/282.122A

CURRENT FILING DATE: 2003-02-20

PRIOR APPLICATION NUMBER: 60/191,078

PRIOR FILING DATE: 2000-03-21

PRIOR APPLICATION NUMBER: 60/206,848

PRIOR FILING DATE: 2000-05-23

PRIOR APPLICATION NUMBER: 60/207,727

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: 60/230,335

PRIOR FILING DATE: 2000-09-06

PRIOR APPLICATION NUMBER: 60/230,347

PRIOR FILING DATE: 2000-09-09

PRIOR APPLICATION NUMBER: 60/242,578

PRIOR FILING DATE: 2000-10-23

PRIOR APPLICATION NUMBER: 60/253,625

PRIOR FILING DATE: 2000-11-27

PRIOR APPLICATION NUMBER: 60/257,931

PRIOR FILING DATE: 2000-12-22

PRIOR APPLICATION NUMBER: 60/267,636

PRIOR FILING DATE: 2001-02-09

PRIOR APPLICATION NUMBER: 60/269,308

PRIOR FILING DATE: 2001-02-16

Remaining Prior Application data removed - See File Wrapper or PALM.

NUMBER OF SEQ ID NOS: 78614

SOFTWARE: PatentIn version 3.1

SEQ ID NO 7596

LENGTH: 1314

TYPE: DNA

ORGANISM: Staphylococcus aureus

US-10-282-122A-7596		Query Match		96.0%; Score 1296.4; DB 13; Length 1314;	
		Best Local Similarity		99.2%; Pred. No. 9.7e-224;	
		Matches 1303; Conservative		0; Mismatches 11; Indels 0; Gaps 0;	
QY	22	ATGACACACTATCTTCGGAATTAAGGTTCTGCGATGAGTTCATTAGCACAAATC	81		
DB	1	ATGACACACTATCTTCGGAATTAAGGTTCTGCGATGAGTTCATTAGCACAAATC	60		
QY	82	ATGACATGATTTAGGACATGAAGTTCAAGGATCGATATTGAGAACTACGTAATTCAGAA	141		
DB	61	ATGACATGATTTAGGACATGAAGTTCAAGGATCGATATTGAGAACTACGTAATTCAGAA	120		
QY	142	GTTCCTCTTAGAAATAAGGGATCAAAATATACCAATTTGCTCTTAATCAATAAAGAA	201		
DB	121	GTTCCTCTTAGAAATAAGGGATCAAAATATATACCAATTTGCTCTTAATCAATAAAGAA	180		
QY	202	GATATGCTAGTTATACAAAGTATGCAATTCGCGAGTAGCCATGCAAGAAATAGTACGTGCA	261		
DB	181	GATATGCTAGTTATACAAAGTATGCAATTCGCGAGTAGCCATGCAAGAAATAGTACGTGCA	240		
QY	262	CATCAATGAAATAGATGTTGTAAGTTAATGATTTTATAGGACAGATTTATGATCAA	321		
DB	241	CATCAATGAAATAGATGTTGTAAGTTAATGATTTTATAGGACAGATTTATGATCAA	300		
QY	322	TATACCTCAGTAGCTGTAAGTGTGACATGGTAAACCTCTACACAGGTTTATTATCA	381		
DB	301	TATACCTCAGTAGCTGTAAGTGTGACATGGTAAACCTCTACACAGGTTTATTATCA	360		
QY	382	CATGTTATGAATGGTGATAAAGACTTCATTTTAAATGCTGATGACAGGTATGGGA	441		
DB	361	CATGTTATGAATGGTGATAAAGACTTCATTTTAAATGCTGATGACAGGTATGGGA	420		
QY	442	TTGCTCTAAGTGAATTTTCGTTTGGCGATGGAATATAGACGTCCTTTTAAAT	501		
DB	421	TTGCTCTAAGTGAATTTTCGTTTGGCGATGGAATATAGACGTCCTTTTAAAT	480		
QY	502	TATAACCTGATTTAGCAATATGACAAATATGATTTGATTCATCTCTGATTTTCAAA	561		
DB	481	TATAACCTGATTTAGCAATATGACAAATATGATTTGATTCATCTCTGATTTTCAAA	540		
QY	562	GATATTAATGATGTTTGTGATTCATTCAGAAATGGCACAATATGTTTAAAGGATTT	621		
DB	541	GATATTAATGATGTTTGTGATTCATTCAGAAATGGCACAATATGTTTAAAGGATTT	600		
QY	622	ATTGCTTGGGCTGATGATGAACATCTACGTAATTAAGTGAAGCATGTTCCATTTATAC	681		
DB	601	ATTGCTTGGGCTGATGATGAACATCTACGTAATTAAGTGAAGCATGTTCCATTTATAT	660		
QY	682	TATGGATTTAAAGATTCGGATGACATTTATGCTCAAAATATTCAAATTCAGGATAAGGT	741		
DB	661	TATGGATTTAAAGATTCGGATGACATTTATGCTCAAAATATTCAAATTCAGGATAAGGT	720		
QY	742	ACTGCTTTTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT	801		
DB	721	ACTGCTTTTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT	780		
QY	802	GGTGACCATACAGTTTAAATGCAATTAAGTGTGATGATGATGATGATGATGATGATGAT	861		
DB	781	GGTGACCATACAGTTTAAATGCAATTAAGTGTGATGATGATGATGATGATGATGATGAT	840		
QY	862	GATGTTTCAATATTAAGAGGATTAAGAGGTTTGGTGTGTTTAAACGTCGTTTCAAT	921		
DB	841	GATGTTTCAATATTAAGAGGATTAAGAGGTTTGGTGTGTTTAAACGTCGTTTCAAT	900		
QY	922	GAAACTCAATTTGCAAAATCAAGTTTATGATGATGATGATGATGATGATGATGATGAT	981		
DB	901	GAAACTCAATTTGCAAAATCAAGTTTATGATGATGATGATGATGATGATGATGATGAT	960		
QY	982	AGTGTCTCAATTTGACACAGCAAGAAATATCCACATAAAGAGGTTTGGTGTGATTT	1041		
DB	961	AGTGTCTCAATTTGACACAGCAAGAAATATCCACATAAAGAGGTTTGGTGTGATTT	1020		

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1282

1261

QY

DB

QY

DB

QY

DB

QY

DB

QY

DB

CAACCACACACTTCTCTAGACACACAAAGCAATTTTAAATGAATTTGAGAAAGTTTATGT

CAACCACACACTTCTCTAGACACACAAAGCAATTTTAAATGAATTTGAGAAAGTTTATGT

AAAGCAGATGCTGTATCTTCTATGTAATTTTGGCTCAATTAGAGAAAATCTGGCGCA

AAAGCAGATGCTGTATCTTCTATGTAATTTTGGATCAATTAGAGAAAATCTGGCGCA

TTAAACATACAAAGATTTAAATTTGATTAATTTGAGGTCATCTGTTTAAATGAAGATCTT

TTAAACATACAAAGATTTAAATTTGATTAATTTGAGGTCATCTGTTTAAATGAAGATCTT

ATTAATGTTATTAGAAACAATTTGATTAATTTGATTTTATTTATTTATGGTGCAGGTATTT

ATTAATGTTATTAGAAACAATTTGATTAATTTGATTTTATTTATTTATGGTGCAGGTATTT

CAAAAATTTACAAAATGCTATTTTAGATAAAATTTAGGCATGAAAATGCGTTTAA

CAAAAATTTACAAAATGCTATTTTAGATAAAATTTAGGCATGAAAATGCGTTTAA

1101

1080

1161

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1200

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1314

US-09-815-242-4242

Sequence 4242, Application US/09815242

Patent No. US20020061569A1

GENERAL INFORMATION:

APPLICANT: Haselbeck, Robert

APPLICANT: Chlsen, Kari L.

APPLICANT: Zyskind, Judith W.

APPLICANT: Wall, Daniel

APPLICANT: Trawick, John D.

APPLICANT: Carr, Grant J.

APPLICANT: Yamamoto, Robert T.

APPLICANT: Xu, H. Howard

TITLE OF INVENTION: Identification of Essential Genes in

TITLE OF INVENTION: Prokaryotes

FILE REFERENCE: ELITRA.011A

CURRENT APPLICATION NUMBER: US/09/815,242

CURRENT FILING DATE: 2001-03-21

PRIOR APPLICATION NUMBER: 60/191,078

PRIOR FILING DATE: 2000-03-21

PRIOR APPLICATION NUMBER: 60/206,848

PRIOR FILING DATE: 2000-05-23

PRIOR APPLICATION NUMBER: 60/207,727

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: 60/242,578

PRIOR FILING DATE: 2000-10-23

PRIOR APPLICATION NUMBER: 60/253,625

PRIOR FILING DATE: 2000-11-27

PRIOR APPLICATION NUMBER: 60/257,931

PRIOR FILING DATE: 2000-12-22

PRIOR APPLICATION NUMBER: 60/269,308

PRIOR FILING DATE: 2001-02-16

NUMBER OF SEQ ID NOS: 14110

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 4242

LENGTH: 1311

TYPE: DNA

ORGANISM: Staphylococcus aureus

Query Match

Best Local Similarity

Matches 1301; Conservative

95.9%; Score 1295; DB 9; Length 1311;

99.2%; Pred. No. 1.7e-223;

0; Mismatches 10; Indels 3; Gaps 0;

22

1

82

61

QY

DB

QY

DB

ATGACACACTATCTTTCGCGAATTAAGGTTCTGCGATGAGTTCATTAGCACAAATC

ATGACACACTATCTTTCGCGAATTAAGGTTCTGCGATGAGTTCATTAGCACAAATC

ATGACATGATTTAGGACATGAAGTTCAAGGATCGATATTGAGAACTACGTAATTCAGAA

ATGACATGATTTAGGACATGAAGTTCAAGGATCGATATTGAGAACTACGTAATTCAGAA

81

60

141

120

QY

DB

QY

DB

ATGACACACTATCTTTCGCGAATTAAGGTTCTGCGATGAGTTCATTAGCACAAATC

ATGACACACTATCTTTCGCGAATTAAGGTTCTGCGATGAGTTCATTAGCACAAATC

ATGACATGATTTAGGACATGAAGTTCAAGGATCGATATTGAGAACTACGTAATTCAGAA

ATGACATGATTTAGGACATGAAGTTCAAGGATCGATATTGAGAACTACGTAATTCAGAA

1101

1080

1161

1140

1221

1200

1281

1260

1335

1314

US-09-815-242-4242

Sequence 4242, Application US/09815242

Patent No. US20020061569A1

GENERAL INFORMATION:

APPLICANT: Haselbeck, Robert

APPLICANT: Chlsen, Kari L.

APPLICANT: Zyskind, Judith W.

APPLICANT: Wall, Daniel

APPLICANT: Trawick, John D.

APPLICANT: Carr, Grant J.

APPLICANT: Yamamoto, Robert T.

APPLICANT: Xu, H. Howard

TITLE OF INVENTION: Identification of Essential Genes in

TITLE OF INVENTION: Prokaryotes

FILE REFERENCE: ELITRA.011A

CURRENT APPLICATION NUMBER: US/09/815,242

CURRENT FILING DATE: 2001-03-21

PRIOR APPLICATION NUMBER: 60/191,078

PRIOR FILING DATE: 2000-03-21

PRIOR APPLICATION NUMBER: 60/206,848

PRIOR FILING DATE: 2000-05-23

PRIOR APPLICATION NUMBER: 60/207,727

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: 60/242,578

PRIOR FILING DATE: 2000-10-23

PRIOR APPLICATION NUMBER: 60/253,625

PRIOR FILING DATE: 2000-11-27

PRIOR APPLICATION NUMBER: 60/257,931

PRIOR FILING DATE: 2000-12-22

PRIOR APPLICATION NUMBER: 60/269,308

PRIOR FILING DATE: 2001-02-16

NUMBER OF SEQ ID NOS: 14110

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 4242

LENGTH: 1311

TYPE: DNA

ORGANISM: Staphylococcus aureus

Query Match

Best Local Similarity

Matches 1301; Conservative

95.9%; Score 1295; DB 9; Length 1311;

99.2%; Pred. No. 1.7e-223;

0; Mismatches 10; Indels 3; Gaps 0;

22

1

82

61

QY

DB

QY

DB

ATGACACACTATCTTTCGCGAATTAAGGTTCTGCGATGAGTTCATTAGCACAAATC

ATGACACACTATCTTTCGCGAATTAAGGTTCTGCGATGAGTTCATTAGCACAAATC

ATGACATGATTTAGGACATGAAGTTCAAGGATCGATATTGAGAACTACGTAATTCAGAA

ATGACATGATTTAGGACATGAAGTTCAAGGATCGATATTGAGAACTACGTAATTCAGAA

81

60

141

120

QY

DB

QY

DB

ATGACACACTATCTTTCGCGAATTAAGGTTCTGCGATGAGTTCATTAGCACAAATC

ATGACACACTATCTTTCGCGAATTAAGGTTCTGCGATGAGTTCATTAGCACAAATC

ATGACATGATTTAGGACATGAAGTTCAAGGATCGATATTGAGAACTACGTAATTCAGAA

ATGACATGATTTAGGACATGAAGTTCAAGGATCGATATTGAGAACTACGTAATTCAGAA

1101

1080

1161

1140

1221

1200

1281

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1335

1314

US-09-815-242-4242

Sequence 4242, Application US/09815242

Patent No. US20020061569A1

GENERAL INFORMATION:

APPLICANT: Haselbeck, Robert

APPLICANT: Chlsen, Kari L.

APPLICANT: Zyskind, Judith W.

APPLICANT: Wall, Daniel

APPLICANT: Trawick, John D.

APPLICANT: Carr, Grant J.

APPLICANT: Yamamoto, Robert T.

APPLICANT: Xu, H. Howard

TITLE OF INVENTION: Identification of Essential Genes in

TITLE OF INVENTION: Prokaryotes

FILE REFERENCE: ELITRA.011A

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PRIOR FILING DATE: 2000-05-23

PRIOR APPLICATION NUMBER: 60/207,727

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PRIOR FILING DATE: 2000-12-22

PRIOR APPLICATION NUMBER: 60/269,308

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NUMBER OF SEQ ID NOS: 14110

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 4242

LENGTH: 1311

TYPE: DNA

ORGANISM: Staphylococcus aureus

Query Match

Best Local Similarity

Matches 1301; Conservative

95.9%; Score 1295; DB 9; Length 1311;

99.2%; Pred. No. 1.7e-223;

0; Mismatches 10; Indels 3; Gaps 0;

22

1

82

61

QY

DB

QY

DB

ATGACACACTATCTTTCGCGAATTAAGGTTCTGCGATGAGTTCATTAGCACAAATC

ATGACACACTATCTTTCGCGAATTAAGGTTCTGCGATGAGTTCATTAGCACAAATC

ATGACATGATTTAGGACATGAAGTTCAAGGATCGATATTGAGAACTACGTAATTCAGAA

ATGACATGATTTAGGACATGAAGTTCAAGGATCGATATTGAGAACTACGTAATTCAGAA

81

60

141

120

QY

DB

QY

DB

ATGACACACTATCTTTCGCGAATTAAGGTTCTGCGATGAGTTCATTAGCACAAATC

ATGACACACTATCTTTCGCGAATTAAGGTTCTGCGATGAGTTCATTAGCACAAATC

ATGACATGATTTAGGACATGAAGTTCAAGGATCGATATTGAGAACTACGTAATTCAGAA

ATGACATGATTTAGGACATGAAGTTCAAGGATCGATATTGAGAACTACGTAATTCAGAA

1101

1080

1161

1140

1221

1200

1281

1260

1335

1314

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QY 142 GTTGTCTTGAAGAAATAGGGGATAAATACTATACCAATTTGGTCTTAATAACATAAAGAA 201
Db 121 GTTGTCTTGAAGAAATAGGGGATAAATACTATACCAATTTGGTCTTAATAACATAAAGAA 180
QY 202 GATATGTTAGTTATACAGGTAAATGCAATTCGGCAGTAGCCATGAAGAAATAGTACGTGCA 261
Db 181 GATATGTTAGTTATACAGGTAAATGCAATTCGGCAGTAGCCATGAAGAAATAGTACGTGCA 240
QY 262 CATCAATTTGAAATTTAGATGTTGAAGTTATAATGATTTTATAGGACAGATTTATGATCAA 321
Db 241 CATCAATTTGAAATTTAGATGTTGAAGTTATAATGATTTTATAGGACAGATTTATGATCAA 300
QY 322 TATACCTTCAGTCTGTAAGTGGTGCACATGTTGAAGTCTCTACACAGGTTTATATATCA 381
Db 301 TATACCTTCAGTCTGTAAGTGGTGCACATGTTGAAGTCTCTACACAGGTTTATATATCA 360
QY 382 CATGTTATGAATGGTGATAAAGACCTTCATTTTAAATTTGGTGTATGGCAGGATATGGGA 441
Db 361 CATGTTATGAATGGTGATAAAGACCTTCATTTTAAATTTGGTGTATGGCAGGATATGGGA 420
QY 442 TTGCTGAAAGTGAATTTTGGCTTTTGAAGCATGTAATATAGACGTCTCACTTTTAAAGT 501
Db 421 TTGCTGAAAGTGAATTTTGGCTTTTGAAGCATGTAATATAGACGTCTCACTTTTAAAGT 480
QY 502 TATAAACCCTGATTACGCAATATGACAAATATGATTTTCGATCATCTCGATTTATTTCAA 561
Db 481 TATAAACCCTGATTACGCAATATGACAAATATGATTTTCGATCATCTCGATTTATTTCAA 540
QY 562 GATATTAAATGATGTTTTTGTATGATTTCCAAAGAAATGGCACAATATGTTTAAAGAGTATT 621
Db 541 GATATTAAATGATGTTTTTGTATGATTTCCAAAGAAATGGCACAATATGTTTAAAGAGTATT 600
QY 622 ATTGCTTGGGGTGATGATGAACATCTAGCTGAATTTGAAGCATGTTCCAAATTTTATAC 681
Db 601 ATTGCTTGGGGTGATGATGAACATCTAGCTGAATTTGAAGCATGTTCCAAATTTTATAC 660
QY 682 TATGGATTTTAAAGATTCGGATGACATTTATGCTCAAAATATTCAAATTTAGCGATAAAGGT 741
Db 661 TATGGATTTTAAAGATTCGGATGACATTTATGCTCAAAATATTCAAATTTAGCGATAAAGGT 720
QY 742 ACTGCTTTTATGATGTATGCGATGGTGGATTTTATGATCACTTTCTGTCTCCCAATAT 801
Db 721 ACTGCTTTTATGATGTATGCGATGGTGGATTTTATGATCACTTTCTGTCTCCCAATAT 780
QY 802 GGTGACCATACAGTTTAAATGCAATAGCTGTAATTTGGATTTATTTAGAGAGCTA 861
Db 781 GGTGACCATACAGTTTAAATGCAATAGCTGTAATTTGGATTTATTTAGAGAGCTA 840
QY 862 GATGTTTCAATATTTAAGAGCATTTAGAACGTTTGGTGGTGTAAACGTCGTTTCAAT 921
Db 841 GATGTTTCAATATTTAAGAGCATTTAGAACGTTTGGTGGTGTAAACGTCGTTTCAAT 900
QY 922 GAAACTCAATTTGCAAAATCAAGTTTATTGTAGATGATTTATGACACCAATCCAAAGAAAT 981
Db 901 GAAACTCAATTTGCAAAATCAAGTTTATTGTAGATGATTTATGACACCAATCCAAAGAAAT 960
QY 982 AGTGCTCAATTTGACACAGCAGAAAGAAATATCCACATTAAGAGTTGTTGCGATTTT 1041
Db 961 AGTGCTCAATTTGACACAGCAGAAAGAAATATCCACATTAAGAGTTGTTGCGATTTT 1020
QY 1042 CAACACACACATTTCTCTAGAACACCAAGCATTTTAAATGATTTTGCAGAAAGTTTATG 1101
Db 1021 CAACACACACATTTCTCTAGAACACCAAGCATTTTAAATGATTTTGCAGAAAGTTTATG 1080
QY 1102 AAAGCAGATCGTGATTTCTTATGTGAAATTTTGGCTCAATTTAGAGAAATTTCTGGCGA 1161
Db 1081 AAAGCAGATCGTGATTTCTTATGTGAAATTTTGGCTCAATTTAGAGAAATTTCTGGCGA 1140
QY 1162 TTAAGCATCAAGATTTTAAATGATTAATTTGAGGTGTCATCGTTTCAATTAATGAGATCTT 1221
Db 1141 TTAAGCATCAAGATTTTAAATGATTAATTTGAGGTGTCATCGTTTCAATTAATGAGATCTT 1200
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QY 1222 ATTAATGTATTAGACAAATTTGATAATGCTGTGTTGTTTATTTATGCGTGCAGGTGATATT 1281
Db 1201 ATTAATGTATTAGACAAATTTGATAATGCTGTGTTGTTTATTTATGCGTGCAGGTGATATT 1260
QY 1282 CAAAAATTCAAAATGCATATTTAGATAAATTTAGGCATGAAGAAATGCGTTT 1332
Db 1261 CAAAAATTCAAAATGCATATTTAGATAAATTTAGGCATGAAGAAATGCGTTT 1311

RESULT 6
US-09-925-637-1
; Sequence 1, Application US/09925637
; Patent No. US2002010338A1
; GENERAL INFORMATION:
; APPLICANT: Choi
; TITLE OF INVENTION: Staphylococcus aureus Polynucleotides and Polypeptides
; FILE REFERENCE: PB560
; CURRENT APPLICATION NUMBER: US/09/925,637
; CURRENT FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: PCT/US00/23773
; PRIOR FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: US 60/151,933
; PRIOR FILING DATE: 1999-09-01
; PRIOR APPLICATION NUMBER: US 08/781,986
; PRIOR FILING DATE: 1997-01-03
; PRIOR APPLICATION NUMBER: US 08/956,171
; PRIOR FILING DATE: 1997-10-20
; PRIOR APPLICATION NUMBER: US 60/009,865
; PRIOR FILING DATE: 1996-01-06
; NUMBER OF SEQ ID NOS: 74
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 1
; LENGTH: 1318
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-925-637-1

Query Match 95.7%; Score 1293.2; DB 9; Length 1318;
Best Local Similarity 99.0%; Pred. No. 3.7e-223;
Matches 1301; Conservative 0; Mismatches 13; Indels 0; Gaps 0;

QY 22 ATGACACACTATCATTTTGTGCGAAATTTAAAGTTCTGCGCATGAGTTCAATTAGCACAATC 81
Db 1 ATGACACACTATCATTTTGTGCGAAATTTAAAGTTCTGCGCATGAGTTCAATTAGCACAATC 60
QY 82 ATGCATGATTTAGGACATGAAGTTCAAGATTCGGAATTTGAGAACTAGTATTACAGAA 141
Db 61 ATGCATGATTTAGGACATGAAGTTCAAGATTCGGAATTTGAGAACTAGTATTACAGAA 120
QY 142 GTTCTCTTACAAAATAGGGGATAAAATATTACCATTTGGTGTCTTAATAACATAAAGAA 201
Db 121 GTTCTCTTACAAAATAGGGGATAAAATATTACCATTTGGTGTCTTAATAACATAAAGAA 180
QY 202 GATATGTTAGTTATACAGGTAATGCAATTCGGAGTAGCCATGAAGAAATAGTACGTGCA 261
Db 181 GATATGTTAGTTATACAGGTAATGCAATTCGGAGTAGCCATGAAGAAATAGTACGTGCA 240
QY 262 CATCAATTTGAAATTTAGATGTTGTAAGTTATAAATGATTTTATAGGACAGATTTATGATCAA 321
Db 241 CATCAATTTGAAATTTAGATGTTGTAAGTTATAAATGATTTTATAGGACAGATTTATGATCAA 300
QY 322 TATACCTTCAGTCTGTAAGTGGTGCACATGTTGAAGTCTCTACACAGGTTTATATATCA 381
Db 301 TATACCTTCAGTCTGTAAGTGGTGCACATGTTGAAGTCTCTACACAGGTTTATATATCA 360
QY 382 CATGTTATGAATGGTGATAAAGACCTTCATTTTAAATTTGGTGTATGGCAGGATATGGGA 441
Db 361 CATGTTATGAATGGTGATAAAGACCTTCATTTTAAATTTGGTGTATGGCAGGATATGGGA 420
QY 442 TTGCTGAAAGTGAATTTTGGCTTTTGAAGCATGTAATATAGACGTCTCACTTTTAAAGT 501
Db 421 TTGCTGAAAGTGAATTTTGGCTTTTGAAGCATGTAATATAGACGTCTCACTTTTAAAGT 480
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QY 502 TATAAACCTGATACGAAATATACAAATATGATTTGATTCGATCATCTGATTTATTTCAA 561
Db 481 TATAAACCTGATACGAAATATACAAATATGATTTGATTCGATCATCTGATTTATTTAA 540
QY 562 GATATTAATGATGTTTGTGATGATTCGAAATATGCAATATGCAATATGCAATATGCA 621
Db 541 GATATTAATGATGTTTGTGATGATTCGAAATATGCAATATGCAATATGCAATATGCA 600
QY 622 ATTGCTTTGGGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 681
Db 601 ATTGCTTTGGGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 660
QY 682 TATGATTTAAGATTCGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 741
Db 661 TATGATTTAAGATTCGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 720
QY 742 ACTGCTTTTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 801
Db 721 ACTGCTTTTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 780
QY 802 GGTGACCATACAGTTTAAATGCAATGATGATGATGATGATGATGATGATGATGATGAT 861
Db 781 GGTGACCATACAGTTTAAATGCAATGATGATGATGATGATGATGATGATGATGATGAT 840
QY 862 GATGCTTACCAATATTAAGAGCAATAGAAAGCTTTGTTGTTGTTGTTGTTGTTGTTG 921
Db 841 GATGTTTACCAATATTAAGAGCAATAGAAAGCTTTGTTGTTGTTGTTGTTGTTGTTG 900
QY 922 GAAATACCAATATTAAGAGCAATAGAAAGCTTTGTTGTTGTTGTTGTTGTTGTTGTT 981
Db 901 GAAATACCAATATTAAGAGCAATAGAAAGCTTTGTTGTTGTTGTTGTTGTTGTTGTT 960
QY 982 AGTGTACCAATATTAAGAGCAATAGAAAGCTTTGTTGTTGTTGTTGTTGTTGTTGTT 1041
Db 961 AGTGTACCAATATTAAGAGCAATAGAAAGCTTTGTTGTTGTTGTTGTTGTTGTTGTT 1020
QY 1042 CAACACACACATTTCTCTAGAACACAAAGCAATTTTAAATGAAATTTGCAAGAAATTTAT 1101
Db 1021 CAACACACACATTTCTCTAGAACACAAAGCAATTTTAAATGAAATTTGCAAGAAATTTAT 1080
QY 1102 AAAGCAGATGCTGTATTTCTTATGTGAATTTTGTGATGATGATGATGATGATGATGAT 1161
Db 1081 AAAGCAGATGCTGTATTTCTTATGTGAATTTTGTGATGATGATGATGATGATGATGAT 1140
QY 1162 TTAAGCATACAGATTTAATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1221
Db 1141 TTAAGCATACAGATTTAATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1200
QY 1222 ATTATGATTTAGAACCAATTTGATGATGATGATGATGATGATGATGATGATGATGAT 1281
Db 1201 ATTATGATTTAGAACCAATTTGATGATGATGATGATGATGATGATGATGATGATGAT 1260
QY 1282 CAAAAATACAAAATGCAATTTAGATAAATAGGCAATGAAATAGGCTTTTAA 1335
Db 1261 CAAAAATACAAAATGCAATTTAGATAAATAGGCAATGAAATAGGCTTTTAA 1314

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RESULT 7
US-10-084-205-1
; Sequence 1, Application US/10084205
; Publication No. US20030049648A1
; GENERAL INFORMATION:
; APPLICANT: Choi, Gil
; TITLE OF INVENTION: 37 Staphylococcus aureus Genes and Polypeptides
; FILE REFERENCE: PB515P1
; CURRENT APPLICATION NUMBER: US/10084, 205
; CURRENT FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: PCT/US00/23773
; PRIOR FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: 60/151,933
; PRIOR FILING DATE: 1999-09-01
; NUMBER OF SEQ ID NOS: 74
; SOFTWARE: PatentIn Ver. 3.1

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; SEQ ID NO 1
; LENGTH: 1318
; TYPE: DNA
; ORGANISM: Staphylococcus aureus
; US-10-084-205-1
Query Match
Best Local Similarity 95.7%; Score 1293.2; DB 15; Length 1318;
Matches 1301; Conservative 0; Mismatches 13; Indels 0; Gaps 0;

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QY 22 ATGACACACTATCATTTTGTGCGAATTAAGGTTCTGGCATGAGTTCACTAGACAAATC 81
Db 1 ATGACACACTATCATTTTGTGCGAATTAAGGTTCTGGCATGAGTTCACTAGACAAATC 60
QY 82 ATGCAATGATTTAGGACATGAAGTTCAAGATCGGATATTTAGAACTTACGATTTTACGAA 141
Db 61 ATGCAATGATTTAGGACATGAAGTTCAAGATCGGATATTTAGAACTTACGATTTTACGAA 120
QY 142 GTTGTCTTTAGAAATTAAGGGGATTAATAATTTACCAATTTGGTGCTTAATAACATAAAGAA 201
Db 121 GTTGTCTTTAGAAATTAAGGGGATTAATAATTTACCAATTTGGTGCTTAATAACATAAAGAA 180
QY 202 GATATGTTAGTTATATACAGGTTAATGCAATTCGGGAGTAGCCATGAAGAAATAGTAGCGCA 261
Db 181 GATATGTTAGTTATATACAGGTTAATGCAATTCGGGAGTAGCCATGAAGAAATAGTAGCGCA 240
QY 262 CATCAATTCGAAATTAGATGTTGTAAGTTAATGATTTTATAGGACAGATTTATGATCAA 321
Db 241 CATCAATTCGAAATTAGATGTTGTAAGTTAATGATTTTATAGGACAGATTTATGATCAA 300
QY 322 TATATCTCAGTAGCTGTAAGTGTGCGACATGTTGTAAGTTTCTACACAGGTTTATTTATCA 381
Db 301 TATATCTCAGTAGCTGTAAGTGTGCGACATGTTGTAAGTTTCTACACAGGTTTATTTATCA 360
QY 382 CATGTTATCAATGCTGATATAAAGACTTTCATTTTAAATTTGGTGATGCGACAGGATGCGA 441
Db 361 CATGTTATCAATGCTGATATAAAGACTTTCATTTTAAATTTGGTGATGCGACAGGATGCGA 420
QY 442 TTGCTTGAAGTGAATTTTTCGCTTTTGGGATGATGATGATGATGATGATGATGATGATGAT 501
Db 421 TTGCTTGAAGTGAATTTTTCGCTTTTGGGATGATGATGATGATGATGATGATGATGATGAT 480
QY 502 TATAAACCTGATACGAAATATACAAATATGATTTGATTCGATCATCTGATTTATTTCAA 561
Db 481 TATAAACCTGATACGAAATATACAAATATGATTTGATTCGATCATCTGATTTATTTAA 540
QY 562 GATATTAATGATGTTTGTGATGATTCGAAATATGCAATATGCAATATGCAATATGCA 621
Db 541 GATATTAATGATGTTTGTGATGATTCGAAATATGCAATATGCAATATGCAATATGCA 600
QY 622 ATTGCTTTGGGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 681
Db 601 ATTGCTTTGGGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 660
QY 682 TATGATTTAAGATTCGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 741
Db 661 TATGATTTAAGATTCGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 720
QY 742 ACTGCTTTTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 801
Db 721 ACTGCTTTTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 780
QY 802 GGTGACCATACAGTTTAAATGCAATGATGATGATGATGATGATGATGATGATGATGAT 861
Db 781 GGTGACCATACAGTTTAAATGCAATGATGATGATGATGATGATGATGATGATGATGAT 840
QY 862 GATGCTTACCAATATTAAGAGCAATAGAAAGCTTTGTTGTTGTTGTTGTTGTTGTTG 921
Db 841 GATGTTTACCAATATTAAGAGCAATAGAAAGCTTTGTTGTTGTTGTTGTTGTTGTTG 900
QY 922 GAAATACCAATATTAAGAGCAATAGAAAGCTTTGTTGTTGTTGTTGTTGTTGTTGTT 981
Db 901 GAAATACCAATATTAAGAGCAATAGAAAGCTTTGTTGTTGTTGTTGTTGTTGTTGTT 960

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Qy	982	AGTGCTACAAATTGACACAGCAGCAAGAAATATCCATAAAGAGTGTGTCAGTATTT	1041
Db	961	AGTGCTACAAATTGAAAACAGCAGCAAGAAATATCCATAAAGAGTGTGTCAGTATTT	1020
Qy	1042	CAACCCACACCTTCTCTAGAACACACAGCAATTTTAAATGAATTCGAGAAAGTTTATGT	1101
Db	1021	CAACCCACACCTTCTCTAGAACACACAGCAATTTTAAATGAATTCGAGAAAGTTTATGT	1080
Qy	1102	AAAGCAGATCGTGTATTTCTTATGTGAAATTTTGGCTCAATTTAGAGAAATTTCTGGCGCA	1161
Db	1081	AAAGCAGATCGTGTATTTCTTATGTGAAATTTTGGCTCAATTTAGAGAAATTTCTGGCGCA	1140
Qy	1162	TTAAGCATACAGATTTTAAATGATAAATTCGAGTGCATCGTTCATTAATCAAGATCTT	1221
Db	1141	TTAAGCATACAGATTTTAAATGATAAATTCGAGTGCATCGTTCATTAATCAAGATCTT	1200
Qy	1222	ATTAATGATTAAGAAATTTGATAATGCTGTGTTGTTTATTTATGGTGCAGGTGATAT	1281
Db	1201	ATTAATGATTAAGAAATTTGATAATGCTGTGTTTATTTATTTATTTATGGTGCAGGTGATAT	1260
Qy	1282	CAAAAATTACAAAATGTCATATTTAGCAATTAATTTAGGCATGAAAATGCGTTTAA	1335
Db	1261	CAAAAATTACAAAATGTCATATTTAGCAATTAATTTAGGCATGAAAATGCGTTTAA	1314
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US-10-712-713-1			
; Sequence 1, Application US/10712713			
; Publication No. US20040082002A1			
; GENERAL INFORMATION:			
; APPLICANT: Choi, Gil			
; TITLE OF INVENTION: 37 Staphylococcus aureus Genes and Polypeptides			
; FILE REFERENCE: PB515PI			
; CURRENT APPLICATION NUMBER: US/10/712,713			
; CURRENT FILING DATE: 2003-11-14			
; PRIOR APPLICATION NUMBER: US/10/084,205			
; PRIOR FILING DATE: 2002-02-28			
; PRIOR APPLICATION NUMBER: PCT/US02/23773			
; PRIOR FILING DATE: 2000-08-31			
; PRIOR APPLICATION NUMBER: 60/151,933			
; PRIOR FILING DATE: 1999-09-01			
; NUMBER OF SEQ ID NOS: 74			
; SOFTWARE: Patent In Ver. 3.1			
; SEQ ID NO 1:			
; TYPE: DNA			
; LENGTH: 2318			
; ORGANISM: Staphylococcus aureus			
US-10-712-713-1			
Query Match 95.7%; Score 1293.2; DB 17; Length 1318;			
Best Local Similarity 99.0%; Pred. No. 3.7e-223;			
Matches 1301; Conservative 0; Mismatches 13; Indels 0; Gaps 0;			
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Db	1	ATGCACACATCATCTTTGTCGGAATTAAGGTTCTGSCATGAGTTCATTAGCACAAATC	60
Qy	82	ATGCATGATTTAGACATGAAGTTCAAGGATCGGATTTAGAACTAGTATTTACAGAA	141
Db	61	ATGCATGATTTAGACATGAAGTTCAAGGATCGGATTTAGAACTAGTATTTACAGAA	120
Qy	142	GTTCGCTCTAGAAATTAAGGGATTAATATATTTACCAATTTGGTGTAAATAACATAAAGAA	201
Db	121	GTTCGCTCTAGAAATTAAGGGATTAATATATTTACCAATTTGGTGTAAATAACATAAAGAA	180
Qy	202	GATATGTTAGTTATACAGAGTAATGCATTCGAGTAGCCATGAAGAAATAGTAGTGCA	261
Db	181	GATATGTTAGTTATACAGAGTAATGCATTCGAGTAGCCATGAAGAAATAGTAGTGCA	240
Qy	262	CATCAATGAAATTAGATGTTGTAAGTTAATAGATTTTATAGGACAGATTTATGATCAA	321
Db	241	CATCAATGAAATTAGATGTTGTAAGTTAATAGATTTTATAGGACAGATTTATGATCAA	300

Qy	322	TATACCTCAGTAGCTTAACCTGGTGCAATGGTAAACCTCTTACAAAGGTTTATATCA	381
Db	301	TATACCTCAGTAGCTTAACCTGGTGCAATGGTAAACCTCTTACAAAGGTTTATATCA	360
Qy	382	CATGTTATGAATGGTGATAAAGAAAGCTTCATTTTAAATGGTGATGGCACAGTATGGGA	441
Db	361	CATGTTATGAATGGTGATAAAGAAAGCTTCATTTTAAATGGTGATGGCACAGTATGGGA	420
Qy	442	TTGCCGTGAAGTGAATATTTTCCCTTTTGGGCGATGTGAATATAGAGCTCATCTTTTAAGT	501
Db	421	TTGCCGTGAAGTGAATATTTTCCCTTTTGGGCGATGTGAATATAGAGCTCATCTTTTAAGT	480
Qy	502	TATAAACCTGATTAACGCAATATGACAAATATGATTTTGGATGATCATCTGATTTTCAA	561
Db	481	TATAAACCTGATTAACGCAATATGACAAATATGATTTTGGATGATCATCTGATTTTCAA	540
Qy	562	GATATTAATGATGTTTTCGATGCAATTCGCAAGAAATGGCACAATATGTTTAAAAAGGTAT	621
Db	541	GATATTAATGATGTTTTCGATGCAATTCGCAAGAAATGGCACAATATGTTTAAAAAGGTAT	600
Qy	622	ATTGCTTGGGCTGATGATGAACATCTACGTAATAATTTGAAGCAGATGTTTCCAAATTTATC	681
Db	601	ATTGCTTGGGCTGATGATGAACATCTACGTAATAATTTGAAGCAGATGTTTCCAAATTTATC	660
Qy	682	TATGGATTTAAGATTCGGATGACATTTATGCTCAAAATATTCAAATTTAGCGATAAGGT	741
Db	661	TATGGATTTAAGATTCGGATGACATTTATGCTCAAAATATTCAAATTTAGCGATAAGGT	720
Qy	742	ACTGCTTTTGGATGATGATGGATGATGATGATGATGATGATGATGATGATGATGATGAT	801
Db	721	ACTGCTTTTGGATGATGATGGATGATGATGATGATGATGATGATGATGATGATGATGAT	780
Qy	802	GGTGACCATACAGTTTAAATGATGATGATGATGATGATGATGATGATGATGATGATGAT	861
Db	781	GGTGACCATACAGTTTAAATGATGATGATGATGATGATGATGATGATGATGATGATGAT	840
Qy	862	GATGTTTAAATATTAAGAGCAATTAAGAGCAATTAAGAGCAATTAAGAGCAATTAAGAG	921
Db	841	GATGTTTAAATATTAAGAGCAATTAAGAGCAATTAAGAGCAATTAAGAGCAATTAAGAG	900
Qy	922	GAACTACAAATTCGAAATCAAGTTTATGATGATGATGATGATGATGATGATGATGATGAT	981
Db	901	GAACTACAAATTCGAAATCAAGTTTATGATGATGATGATGATGATGATGATGATGATGAT	960
Qy	982	AGTGCTACAATTCACAGCAAGAAAGATATCCACATAAGAGAGTGTGTCAGTATTT	1041
Db	961	AGTGCTACAATTCACAGCAAGAAAGATATCCACATAAGAGAGTGTGTCAGTATTT	1020
Qy	1042	CAACCCACACCTTCTCTAGAACACAGCAATTTTAAATGAATTTGCGAGAAATTTATGT	1101
Db	1021	CAACCCACACCTTCTCTAGAACACAGCAATTTTAAATGAATTTGCGAGAAATTTATGT	1080
Qy	1102	AAAGCAGATCGTGTATTTCTTATGTGAAATTTTGGCTCAATTTAGAGAAATTTCTGGCGCA	1161
Db	1081	AAAGCAGATCGTGTATTTCTTATGTGAAATTTTGGCTCAATTTAGAGAAATTTCTGGCGCA	1140
Qy	1162	TTAAGCATACAGATTTTAAATGATAAATTTGAGAGTGCATCGTTCATTAATCAAGATCTT	1221
Db	1141	TTAAGCATACAGATTTTAAATGATAAATTTGAGAGTGCATCGTTCATTAATCAAGATCTT	1200
Qy	1222	ATTAATGATTAAGAAATTTGATAATGCTGTGTTTATTTATGGTGCAGGTGATAT	1281
Db	1201	ATTAATGATTAAGAAATTTGATAATGCTGTGTTTATTTATTTATTTATGGTGCAGGTGATAT	1260
Qy	1282	CAAAAATTACAAAATGTCATATTTAGCAATTAATTTAGGCATGAAAATGCGTTTAA	1335
Db	1261	CAAAAATTACAAAATGTCATATTTAGCAATTAATTTAGGCATGAAAATGCGTTTAA	1314

RESULT 9
US-10-282-122A-34994
; Sequence 34994, Application US/1028222A

Publication No.	US20040029129A1
GENERAL INFORMATION:	
APPLICANT:	Wang, Liangsu
APPLICANT:	Zamudio, Carlos
APPLICANT:	Malone, Cheryl
APPLICANT:	Haselbeck, Robert
APPLICANT:	Ohlsen, Kari
APPLICANT:	Zyskind, Judith
APPLICANT:	Wall, Daniel
APPLICANT:	Trawick, John
APPLICANT:	Carz, Grant
APPLICANT:	Yamamoto, Robert
APPLICANT:	Forsyth, R.
APPLICANT:	Xu, H.
TITLE OF INVENTION:	Identification of Essential Genes in Microorganism
FILE REFERENCE:	ELITRA.034A
CURRENT APPLICATION NUMBER:	US/10/282,122A
CURRENT FILING DATE:	2003-02-20
PRIOR APPLICATION NUMBER:	60/191,078
PRIOR FILING DATE:	2000-03-21
PRIOR APPLICATION NUMBER:	60/206,848
PRIOR FILING DATE:	2000-05-23
PRIOR APPLICATION NUMBER:	60/207,727
PRIOR FILING DATE:	2000-05-26
PRIOR APPLICATION NUMBER:	60/230,335
PRIOR FILING DATE:	2000-09-05
PRIOR APPLICATION NUMBER:	60/230,347
PRIOR FILING DATE:	2000-09-09
PRIOR APPLICATION NUMBER:	60/242,578
PRIOR FILING DATE:	2000-10-23
PRIOR APPLICATION NUMBER:	60/253,625
PRIOR FILING DATE:	2000-11-27
PRIOR APPLICATION NUMBER:	60/257,931
PRIOR FILING DATE:	2000-12-22
PRIOR APPLICATION NUMBER:	60/267,636
PRIOR FILING DATE:	2001-02-09
PRIOR APPLICATION NUMBER:	60/269,308
PRIOR FILING DATE:	2001-02-16
Remaining Prior Application data removed - See File Wrapper or PALM.	
NUMBER OF SEQ ID NOS:	78614
SOFTWARE:	Patent in version 3.1
SEQ ID NO	34994
LENGTH:	1311
TYPE:	DNA
ORGANISM:	Staphylococcus epidermidis
US-10-282-122A-34994	
Query Match	67.1%; Score 906.2; DB 13; Length 1311;
Best Local Similarity	80.7%; Pred. No. 1.6e-153;
Matches 1058; Conservative	0; Mismatches 253; Indels 0; Gaps 0;
QY	22 ATGACACACTATCTTTGTCGGAATTAAGGTTCTGGCATGAGTTCATTGCGCACAAATC 81
DB	1 ATGACACACTATCTTTGTCGGAATTAAGGTTCTGGCATGAGTTCATTGCGCACAAATC 60
QY	82 ATGCGATGATTTAGGACATCAAGTTCAAGGATCGATATTTAGGAATCTACGTTATTACAGAA 141
DB	61 ATGCGATGATTTAGGACATCAAGTTCAAGGATCGATATTTAGGAATCTACGTTATTACAGAA 120
QY	142 GTTGTCTCTTTAGAAATAAGGGGATAAAATAATTAACATTTGGTGTCTAATAACATTAAGAA 201
DB	121 GTTGTCTCTTTAGAAATAAGGGGATAAAATAATTAACATTTGGTGTCTAATAACATTAAGAA 180
QY	202 GATATGCTAGTTATACAGTAATGCAATTCGCGGATGAGTCAAGAAATAGTACGTCGA 261
DB	181 GAAATGGTTGTCATCCAAAGGTAATGCAATTTCTGATTAATCATGAAGAATTTGTAGGCA 240
QY	262 CATCAATTTGAATTTAGATGTTGTAAGTTATAATGATTTTATAGGACAGATTTATGATCAA 321
DB	241 CATGAATTTAAGCTTGATATTAATAATATATCATGACTTCTTGTCTATGTTATAAATCAA 300
QY	322 TATACCTTCAGTAGCTGTAACCTGGTGGCACTGGTAAATCTTCTACACAGGTTTATTTACA 381

RESULT 10
US-09-939-980-179/c
; Sequence 179, Application US/09939980
; Patent No. US2002008224A1
; GENERAL INFORMATION:
; APPLICANT: Black, Michael.

US-10-282-122A-10147									
Query Match 43.6%; Score 589.6; DB 13; Length 1308;									
Best Local Similarity 56.0%; Pred. No. 1.6e-96;									
Matches 853; Conservative 0; Mismatches 439; Indels 0; Gaps 0;									
QY	22	ATGACACACTATTCATTTCTCGGAATTAAGGTTCTCGCATAGTTCATTTAGCACAATC	81						
DB	1	ATGACAGTTTACATTTTGTAGGANTTAAGNACAGGATGATTCATTCAGCGCAAT	60						
QY	82	ATSCATGATTAGGACATCAAGGTTCAAGGATCGGATATTGAGACCTACGTTATTACAGAA	141						
DB	61	CTTCATGACATGAGCATACTGTTCAAGGCTCGATTATGAAGGCGTTTCTTTACACAA	120						
QY	142	GTTCCTCTTAGAATTAAGGGGATAAAGATTTACCAATTTGCTCTATATACATAAAGAA	201						
DB	121	ACAGCGTTGGAAGGTAATATCTCGATTCCTTTGATTAAGTAATGTAAGAA	180						
QY	202	GTATGTTAGTTATACAGGTAATGCAATTCGCGAGTAGCCATGAAGAAATAGTACGTGCA	261						
DB	181	GGACAAGTGATTATTCGAGGAATATGCAATTCCTGTATACGATGAAGAAATCGTAGACCA	240						
QY	262	CATCAATTTGAAATTAGATGTTGTAAGTTTAAATGATTTTATGACAGATTTATGATCAA	321						
DB	241	AAAGAAATTAACATCCAGTACATCGTTACCATCACTTCTTAGGTGATCTTATGAACCAA	300						
QY	322	TATACCTCAGTGTAGTGTACGTGCAATGTTGTAACATTTCTCAACAGGTTTATTATCA	381						
DB	301	TACACAACTGTTGCTGTAACTGTGCGTGTGCAATGCAATCAACACTGGTTGTAGCC	360						
QY	382	CATGTTATGATGTTGTAAGAAACATTTCAATTTTAAATGTTGATGACAGGTATGGGA	441						
DB	361	CA-GTAATGCAAGTGCACACCTTACATCTTACCTTATGAGATGGAACGCAATGGG	420						
QY	442	TTGCTCTGAAAGTGAATTTTGGCTTTTGGAGCATGTGAATATAGACGTCACTTTTAAAT	501						
DB	421	GTAGAAATAGTAAGTATTTGTTATTTGAAGCTTGTGAGTATCGTGTCTTCTTGTCT	480						
QY	502	TATAACTGATTAAGTATGATGACAAATTTGATTCGATCATCTGATTTATTTCAA	561						
DB	481	TACAATCCAGACTATGCAATTTATGACAAATTTGATTTGATCATCCAGATTTTCA	540						
QY	562	GATATTAATGATGTTTGTATGATTCGAAGAAATGCAATATGTTTAAAGAGTAT	621						
DB	541	GATATCAATGATTTATTCAGTGCATTCAGAGATGCAATTCAGTGAAGAAAGGCAAT	600						
QY	622	ATTGCTTGGGTGATGATGACATCTAGTAAATTTGAAGCATGATTTCCATTTATAC	681						
DB	601	ATTGCAATGCGAGATGATGAAGAACTTCAAAATTTCAAGCGAAGTACCTGTTATTTTC	660						
QY	682	TATGGATTTAAGATTCGATGACATTTTATGCTCAAAATTTCAATTTACGATTAAGGT	741						
DB	661	TATGGAATTTGAGAGATTAATGATTTCCAGCAGCATTAATCAAGAGAACTGACGGT	720						
QY	742	ACTGCTTTGATGTTGATGATGATGATGATGATGATGATGATGATGATGATGATGAT	801						
DB	721	ACTATTTTCGATGATTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT	780						
QY	802	GGTGACCATACAGTTTAAATGATTTAGTGTGATTTGATTTGATTTGATTTGATTTGAT	861						
DB	781	GGCAACACAGCGTATTAATGATTTAGTGTGATTTGATTTGATTTGATTTGATTTGAT	840						
QY	862	GATGTACAAATTTAAGAGCAATTTAGAAAGCTTTGTTGTTGTTGTTGTTGTTGTTGTT	921						
DB	841	GATGTAGAGCAATTTAAGCATCAGTTTAAACATTTTGAAGGCTTAAGAGTGCCTTAT	900						
QY	922	GAACTTACAAATTTGCAATCAAGTTTATGTAGATGATTTATGCAACCATCAAGAGAAAT	981						
DB	901	GAAAGCCCAATTTGGAGAGCAAGTTATTTGATGACTAGCAACCATCCGACAGAAAT	960						
QY	982	AGTGTCTACAAATTTGACACAGCAAGAAATATCCACATTAAGAGATTTGTTGAGTATTT	1041						
DB	961	AATGCAACGATTTGAGCAGCTCTGTCACAAACATCCAGAGCGTGAATTTGTCGTGATTC	1020						

QY	1042	CAACACACACTTTCTCTAGAACACAGCAATTTTAAATGATTTTGAAGATTTATGT	1101						
DB	1021	CAGCGCACACATTTCTCAGCTACAGAAAGTTCTTAGATGATTCGCTGAAGGCTTAGC	1080						
QY	1102	AAAGCAGATCGTATTTCTTATGCTGAAATTTTGGCTCAATTAGAGAAATTTCTGGGSCA	1161						
DB	1081	AAAGCTGACCAAGTATATTTATGATTTTGGATCAGCGCGCAACAAAGGTGAA	1140						
QY	1162	TTAAGCATCAACATTTAATTTGATAAATTTGAGGTCATGCTTCAATTAATGAAGATCTT	1221						
DB	1141	TTAAGCATCAAGTCTGCAAAAGCTATTGACGCTCAGAACTAATTTACAGATACACA	1200						
QY	1222	ATTAAGTATTAAGCAATTTGATGCTGTTGTTTATTTATGCTGCGAGGTTGATATT	1281						
DB	1201	ACGATGTTAATTAAGAAACATATAAAACGCGCTTCTCATTTTCATGGCGGAGGACATC	1260						
QY	1282	CAAAATTTCAAAATGATATTAGATAAAT	1313						
DB	1261	CAAAATTTCAAGCAGCTTACGTAAGAAGT	1292						

RESULT 12

US-09-815-242-6773

; Sequence 6773, Application US/09815242

; Patent No. US20020061569A1

; GENERAL INFORMATION:

; APPLICANT: Haselbeck, Robert

; APPLICANT: Ohlsen, Kari L.

; APPLICANT: Zyskind, Judith W.

; APPLICANT: Wall, Daniel

; APPLICANT: Trawick, John D.

; APPLICANT: Carr, Grant J.

; APPLICANT: Yamamoto, Robert T.

; APPLICANT: Xu, H. Howard

; TITLE OF INVENTION: Identification of Essential Genes in

; FILE REFERENCE: ELITRA.011A

; CURRENT APPLICATION NUMBER: US/09/815,242

; CURRENT FILING DATE: 2001-03-21

; PRIOR APPLICATION NUMBER: 60/191,078

; PRIOR FILING DATE: 2000-03-21

; PRIOR APPLICATION NUMBER: 60/206,848

; PRIOR FILING DATE: 2000-05-23

; PRIOR APPLICATION NUMBER: 60/207,727

; PRIOR FILING DATE: 2000-05-26

; PRIOR APPLICATION NUMBER: 60/242,578

; PRIOR FILING DATE: 2000-10-23

; PRIOR APPLICATION NUMBER: 60/253,625

; PRIOR FILING DATE: 2000-11-27

; PRIOR APPLICATION NUMBER: 60/257,931

; PRIOR FILING DATE: 2000-12-22

; PRIOR APPLICATION NUMBER: 60/269,308

; PRIOR FILING DATE: 2001-02-16

; NUMBER OF SEQ ID NOS: 14110

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 6773

; LENGTH: 1371

; TYPE: DNA

; ORGANISM: Enterococcus faecalis

; FEATURE:

; NAME/KEY: CDS

; LOCATION: (1)...(1371)

US-09-815-242-6773

Query Match 41.0%; Score 553.4; DB 9; Length 1371;

Best Local Similarity 54.7%; Pred. No. 5.2e-90;

Matches 840; Conservative 0; Mismatches 456; Indels 3; Gaps 1;

QY	31	TATCATTTTGTTCGAATTAAGGTTCTGCGATGAGTTTCAATTAACATCATGATGAT	90						
DB	58	TACCATTTTGTTCGAATTAAGGTTCTGCGATGAGTTTCAATTAACATCATGATGAT	117						

QY	91	TTAGGACATGAGTTCAAGGATCGGATATTCAGAACTACGATATTTACAGAGTTGCTCTT	150
Db	118	AAAGGCTACAACTGTTCAAGGATCGATGTAAGAGTATTTCTTTACAAAGGAGCTT	177
QY	151	AGAATAAGGGGATAAAATATTAACCAATTTGGTCTCTAATAACATAAAAGAGATATGGTA	210
Db	178	GAATAATCAGGTGTCCTTATTTTACCAATTTAATACAGATATATTTGATAAAGACATGAT	237
QY	211	GTTATACAGGTAATGCAATTCGAGTAGCCATGAAGAAATAGTACGTGCACATCAATG	272
Db	238	GTTATGCTGGAATGCTTTTCCAGATACCCATGAGGAATCGCCGCGCCATCGAATTA	297
QY	271	AAATTAGATGTTGTAAGTTAATAGTATTTTATAGACAGATTTATGATCAATATACTTCA	330
Db	298	GGCGCAGAAGTAATTCGTTTCCAGATTTCAATGCTGTTTATCGAACCGTACACAAGC	357
QY	331	GTAGCTGTAACCTGGTGCACATGCTAAACCTTCTCAACACAGGTTTATTTATCATGTTTATG	390
Db	358	ATTGCTGTAAACAGGTCACATGGGAACAAGTACGACTGGTTGCTAGCACATGTAATTA	417
QY	391	AATGGTGATAAAAGACTTCATTTTATTTGGTGTATGSCACAGGTATGGATGGCTGAA	450
Db	418	AGTGTATCAATCCAACTAGTTATTTAATAGGGATGCGACTGGCCGCGGAAACCGAT	477
QY	451	AGTGATTTTTCGCTTTTGGAGCATGTAATATACAGCTCACTTTTAAAGTTATATAACCT	510
Db	478	CTGATTTTCTTTGGCATTTTGAAGCGTGTGAATATCCCGTTCATTTCTGGCTTATTCACCA	537
QY	511	GATTACGCAATATGACAAATATTTGATTTTCGATCTCTGATCTCTGATTTTCAAGATATTAAT	570
Db	538	GATTATGCGATTTATGACGAATATCGATTTTGTATCTCCAGATTTACTACAAGAGCATTTGAG	597
QY	571	GATGTTTTTGATGCAATTCAGAAATGCGACATATGTTTAAAGAGTATTTATGCTTGG	630
Db	598	GACGTTTTTTCAGCGTTTCCAAACAATGGCTCATCAAGTCAAAAAGAAAGAAATTTTGTCTAT	657
QY	631	GGTGATGATGACACTAGTAAATTTGAAGCAGATGTTCCAAATTTATTTACTATGATTT	690
Db	658	GGTGATGATGATGATCTTCGCCAGTTAGATCAGAAAGTCCAGTTTATTTATGCGCTC	717
QY	691	AAAGATTCGGATGACATTTATGCTCAAAATATTTCAAAATTCAGATTAAGGTAAGCTGCTTTT	750
Db	718	ACGGAAGAGATGATATCCAGCCGGAATATTTCAAGAAACAAGGAGGCTCATCTTTT	777
QY	751	GATGATGATGAGTGGATGATTTATGATCACTTCTCTCTCCAAATATGTTGACCAT	810
Db	778	GATGTTTATCAAGAGCTGATTTTGTAGTCAATTTTGTCTTACCAGCATTTGGCCATCAC	837
QY	811	ACAGTTTAAATGCAATGATGCTGTAATTCGATTTAGTATTTATTTAGAGAGCTAGATGTTACA	870
Db	838	AATATCATGAATGCGCTAGTGTGATTTGCTGTGCTTATTTTGAAGAACTTGATATGCCAA	897
QY	871	AATATTAAGAAGCAATTAAGAAAGTTTGGTGGTGTAAACGTCGTTTCAATGAAATCA	930
Db	898	AAAGTCGACAGAAATGCTAAGTTTAAAGGTTGAAACGTCGTTTATAGCGAGAAAAA	957
QY	931	ATGCAATCAAGTATTTAGATGATTTATGACACATCCACAGAAATTTAGTGGCTACA	990
Db	958	GTCAAGTGAATGATTTATTTGATGATTTATGCGCACTCCAGCTGAAATTAAGCAACG	1017
QY	991	ATTGACACAGCAGAAAGAAATATCCACATCAAGAAAGTTTGTTCAGTATTTTCAACACAC	1050
Db	1018	ATTGATGGGCGCCGCAAAATATCTGACAAAGAAATTTATGCTGTCTTCCAGCCACAT	1077
QY	1051	ACTTTCTCTAGAACACACAGCAATTTTAAATGAAATTTGCGAAAGTTTATGTAAGCAGAT	1110
Db	1078	ACATTTACAGCAAAATGCTTTAATGATGATTTTGTCTGAAGCACTGGAATTTGGCAGAT	1137
QY	1111	CGTGATTTCTTATGTGAATTTTGGCTCAATTAGAGAAATTTCTGGCGCAATTAACGATA	1170
Db	1138	GAAGTATTTCTTATGTAATTTTGGCTCTGCGCGTGAACACAAAGCGCAGGATCGCAAT	1197
QY	1171	CAAGATTTAATTGATAAAATTT---GGAGGTGCTGTTTCAATTAATGAAGATCTTATTAAT	1227

Db	1198	GAAGATTTAGGTGAAAAAATTCAAAAAGGTGGACAGTAATTTACCGAAGATTAATGTGTGG	1257
QY	1228	GTATTAGCAAAATTTGATAATGCTGTTGTTTTTATTATGGGTGACAGGTGATATTCCAAAA	1287
Db	1258	CCTTTACTAGATTTTGAATAATGCGAGGTGCTCTTTATGGGTGCTGGCGACGTTTCAGAAA	1317
QY	1288	TTCAAAATGCTATTTTAGATAAATTTAGGCATGAAAAAT	1326
Db	1318	TTTGAACAAGCTACGAAACATTACTAAGTAACACCACT	1356

RESULT 13

US-10-282-122A-21122

Sequence 21122, Application US/10282122A

Publication No. US20040029129A1

GENERAL INFORMATION:

APPLICANT: Wang, Liangsu

APPLICANT: Zamudio, Carlos

APPLICANT: Malone, Cheryl

APPLICANT: Haselbeck, Robert

APPLICANT: Ohlsen, Kari

APPLICANT: Zyskind, Judith

APPLICANT: Wall, Daniel

APPLICANT: Trawick, John

APPLICANT: Carr, Grant

APPLICANT: Yamamoto, Robert

APPLICANT: Forsyth, R.

APPLICANT: Xu, H.

TITLE OF INVENTION: Identification of Essential Genes in Microorganisms

FILE REFERENCE: ELITRA-034A

CURRENT APPLICATION NUMBER: US/10/282,122A

CURRENT FILING DATE: 2003-02-20

PRIOR APPLICATION NUMBER: 60/191,078

PRIOR FILING DATE: 2000-03-21

PRIOR APPLICATION NUMBER: 60/206,848

PRIOR FILING DATE: 2000-05-23

PRIOR APPLICATION NUMBER: 60/207,727

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: 60/230,335

PRIOR FILING DATE: 2000-09-06

PRIOR APPLICATION NUMBER: 60/230,347

PRIOR FILING DATE: 2000-09-09

PRIOR APPLICATION NUMBER: 60/242,578

PRIOR FILING DATE: 2000-10-23

PRIOR APPLICATION NUMBER: 60/253,625

PRIOR FILING DATE: 2000-11-27

PRIOR APPLICATION NUMBER: 60/257,931

PRIOR FILING DATE: 2000-12-22

PRIOR APPLICATION NUMBER: 60/267,636

PRIOR FILING DATE: 2001-02-09

PRIOR APPLICATION NUMBER: 60/269,308

PRIOR FILING DATE: 2001-02-16

Remaining prior application data removed - See File Wrapper or PALM.

NUMBER OF SEQ ID NOS: 78614

SOFTWARE: PatentIn version 3.1

SEQ ID NO 21122

LENGTH: 1335

TYPE: DNA

ORGANISM: Enterococcus faecalis

US-10-282-122A-21122

Query Match 40.8%; Score 551.8; DB 13; Length 1335;

Best Local Similarity 64.6%; Pred. No. 1e-89;

Mismatches 839; Conservative 0; Mismatches 457; Indels 3; Gaps 1;

QY	31	TATCATTTTGTTCGAATTAAGGTTCTGGCATGATTCATTAGCACAAATCATCATGAT	90
Db	25	TACCATTTTGTTCGAATTAAGGTTCTGGCATGATTCATTAGCGTTGGTTCATACCA	84
QY	91	TTAGGACATGAGTTCAAGGATCGGATATTTAGAACTATTTAGAGAGTTGCTCTT	150
Db	85	AAAGGCTACAACTGTTCAAGGATCGGATATTTAGAGAGTTTCTTTTACACACGGAATCTT	144

QY	1228	GTATTGACAAATTTTGATAATGCTGTGGTATTATTTATGGGTGCAGGTGCAATTCAAAAA	1287
DB	1225	CCTTTACTAGATTTTGAATATGAGTGGTGGTCTTTATGGTGTGGCGACGTTCAGAAA	1284
QY	1288	TTCAAAAATGCAATTTTAGATAAATAGGCCATGAAAAAT	1326
DB	1285	TTTTGACAAGCTTACGAAACATTACTAAGTAACCAACT	1323
 RESULT 14 US-10-398-221-2058/c ; Sequence 2058, Application US/10398221 ; Publication No. US20040018514M ; GENERAL INFORMATION: ; APPLICANT: KONST, Frederik ; APPLICANT: GLASER, Philippe ; TITLE OF INVENTION: Listeria innocua, genome and applications ; FILE REFERENCE: 344 702 - US ; CURRENT APPLICATION NUMBER: US/10/398,221 ; CURRENT FILING DATE: 2003-03-27 ; PRIOR APPLICATION NUMBER: PCT/FR 01/03 C61 ; PRIOR FILING DATE: 2001-10-04 ; PRIOR APPLICATION NUMBER: FR 00/12 697 ; PRIOR FILING DATE: 2000-10-04 ; NUMBER OF SEQ ID NOS: 4025 ; SOFTWARE: PatentIn version 3.0 ; SEQ ID NO 2058 ; LENGTH: 3011208 ; TYPE: DNA ; ORGANISM: Listeria innocua US-10-398-221-2058			
 Query Match 39.3%; Score 531.2; DB 16; Length 3011208; Best Local Similarity 62.1%; Pred. No. 8.e-85; Matches 836; Conservative 0; Mismatches 508; Indels 0; Gaps 0;			
QY	7	AAGGAGTGTTTATATATATGACACATCATCTATTTTGTCCGAATTAAGGTTCTCGGCATGAGT	66
DB	1658048	ATGGGGGTTCAAATATATGACTATCTATCAITTTTGTGGAATAAAGGTCGGGAATGAGT	1657989
QY	67	TCATTAGCAAAATCATGATGATTAGGACATGAAAGTTCAAGGATCGGATATTGAGAAC	126
DB	1657988	GCACTTGCTCAGATCTCGCACGATAAAGGTTTCAAGTGCAAGGCAGGATGTAGACAAA	1657929
QY	127	TACGTTATTTACAGAGTGTCTCTTAGAAAATAAGGGGATAAAAFATTAACCATTTGGTGCT	186
DB	1657928	TATTTTTTCCGCGAAGCAATTTGGAGAAACAAATTCATATGACGTTTTCCAGC	1657869
QY	187	AATAACATAAAAAGAAGATATGTTAGTTATACAGGTAATGCAATTCGCGAGTAGCCATGAA	246
DB	1657868	GATAATATAAAGAAGSCCTAACAAATATTGCTGTAATGCAITTCACAGATACACATGAA	1657809
QY	247	GAATATAGTACGTGCACATCAATTCAAATTAGATGTTGTAGTTATAATGATTAATGATTTT	306
DB	1657808	GAAATTTGAGCGTGTCTAATGAGCTTAATCTCCCGTGATTCATATCAATAATTTTAGGT	1657749
QY	307	CAGATTATTCATCAATATACCTTCAGTAGCTGTAACTGGTGCACATGGTAAACCTTCTACA	366
DB	1657748	CAATTAATAGATGGCTATACAAGTATTGCAATACTGGTTCTCATGTTAAACATCGACA	1657689
QY	367	ACAGGTTTATTATCACATGTTATGAATGGTGATTAAGAAGCATTCATTTTAAATTCGTGAT	426
DB	1657688	ACTGGTCTTCTTCTCATGTGGTCCGGTCCCAATTCGTCCTTCATATTTGATTTGGTGAT	1657629
QY	427	GGCACAGGATATGGATGGCTCCGTAAGTGCATTTTCGCTTTTGGGCGCATGTGAATATAGA	486
DB	1657628	GGAACCTGGTAGTGCCAACAAAGATGCTAAATTTTGGTTAGAGCTTGTGAGTATCAA	1657569
QY	487	CGTCACCTTTTAAAGTTAATAACCTGATACGCAATTTATGACAAATPATTTGATTTTCGATCAT	546
DB	1657568	CGCCATTTCCCTTGGGTACAAACCAACTTATGCAATTTATGACCACCAATTCAGCTGGGATCAC	1657509
QY	547	CCTGATTTATTTCAAAGATATTAATGATGTTTTTGTGATTCACCAAGAAATGGCACATAAT	606

QY	151	AGAAATRAGGGGATAAAAAATATTACCAATTTGGTGCTTAATAACATPAAAGAGAATATGGTA	210
DB	145	GAATAATCAGGTGCTCCCTATTTTTACCATTATTCAGATAATATTGATAAAGACATGATT	204
QY	211	GTTATACAAGGTAATGCAATTCGGAGTAGCCATCGAGAAATAGTACGTGCACATCAATTCG	270
DB	205	GTTATTGCTGGAAATGCTTTTCCAGATACCCATGAGGAAATCGCCCGCCGCTTCGAATTA	264
QY	271	AAATTAGATGTTGAAGTTATTAATGATTTTATAGACAGATTATTTGATCAATATPACTTCA	330
DB	265	GCGCGAGAAGTAATTCGTTTACCAAGTTTCATTGCTGCTTTATCGAACCGTACACAAGC	324
QY	331	GTAGCTGTAACTGGTGCACATGGTAAAACTTCTACAACAGGTTTATTATCACATGTTATG	390
DB	325	ATTGCTGTACAGGGTCCATGGGGAACAAGTAGCACTGGCTTTGCTAGCACATGTATTA	384
QY	391	AATGGTGATAAAAAGACCTTCATTTTAAATTGGTGAATGGCACAGGTATGGGATTCGCTGAA	450
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QY	451	AGTGATATTTCGCTTTTGAGCGATGTGAATATAGACGTCACTTTTAAAGTTATTAACCT	510
DB	445	GCTGATTTCTTTGCAITTTGAAGCGTGTGAGTATCSCGTCATTTCTTGGCTTATTCACCA	504
QY	511	GATTAGCAATTATGACAAATATTGATTTTCSATCATCTCTGATTTATTTCAAGATATTAAAT	570
DB	505	GATTATGCCATTTATGACGAATATCGATTTTGTATCATCCAGATTACTACAAGAGCATTTGAG	564
QY	571	GATGTTTTTGTGCAITTCOAGAAATGGCACATAATGTTTAAAAAAGSTATTATTGCTTGG	630
DB	565	GACGTTTTTTCAGCGTTCAAAACAATGGGCTCATCAAGTCAAAAAGGAATTTTTCGCTTAT	624
QY	631	GGTGATGATGACATCTAGTAAATTTGAAGCAGATGTTCCAAATTTATTACTATGCGATTT	690
DB	625	GGTGATGATTAAGTATCTTCGCCAGTTAGATTCAGAAGTCCAGTTTATTATTATGCGTC	684
QY	691	AAAGATTCGGATGACATTTATGCTCAAAATATTCAAATTCGGATAAGGTAAGTCTGCTTT	750
DB	685	AGCGAAGAGATGATATCCAGGCCGAATATTCAACGAACAACGGAAGGCTCATCTTTT	744
QY	751	GATGTGTATGTGGATGGTGAGTTTATGATCATCTTCTGTCTCCACAATATCGTGACCAT	810
DB	745	GATGTTTATCACAGGATGATTTTGTAGTGCATTTTGTCTTACGAGCATTTGGCCATCAC	804
QY	811	ACAGTTTAAATGCAATTAGCTGTAATTTGCGATTTAGTTTATTAGAGAAGCTAGATGTACA	870
DB	805	AATATCATGAATGCGTAGGTGTGATTTGCTGTGGCTTATTTTGAAAAACTTGTATGCAA	864
QY	871	AATATTAAAGAAGCATTAGAAAAGTTTGGTGGTTTAAACGTCGTTTCAATGAAACTACA	930
DB	865	AAAGTCGAGNAGAAATGCTAAGTTTAAAGGTGTAAGCGTTTATGCGAGAAAAAA	924
QY	931	ATTGCAAAATCAAGTTATTGTAGATGATATGCACACCATCCAGAGAGAAATTATGTCACA	990
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QY	991	ATTGACACAGCACGAGAAATATCCACATAAAGAGCTGTGTGAGTATTTCACACACAC	1050
DB	985	ATTGATGGCGTCCGCCAAAAATATCCCTGACAAAGAAATTTATGCTGTCTTCAGGCACAT	1044
QY	1051	ACTTTTCTTAGAACACAAAGCATTTTAAATGAAATTTGCAGAAAGTTTATGTAAGACGAT	1110
DB	1045	KCAATTTACAGNACAAATTCGCTTAAATGATGAAATTTGCTGAAGCACTGGATTTGGCAGAT	1104
QY	1111	CGTGATTTCTTATGTGAAATTTTGGCTCAATTAGAGAAATTTCTGGCGCHTTAACGATA	1170
DB	1105	GAAGTATTTCTTATGTAATTTTGGCTCTCGCGGTGAAAACACAAAGCGCAGGTACGCAT	1164
QY	1171	CAAGATTTAATTGATAAAATTT---GGAGGTGCACTGTTTCATTATTAAGATCTTTATTAAAT	1227
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QY 607 GTTAAAAAGGTTATTTGCTTGGGTGATGATGACATCTAGCTAAATTTGAAGCAGAT 666
Db 1657448 GTGAAAAAGCAGATTTTGGCTTAGGAGACGATGTTGAATCTAGCGAAATTTATCGTAGAC 1657389
QY 667 GTTCCAAATTTATTTACTATGATGATTTAAAGATTCGGAAGCAATTTATGCTCAAAATATTCAA 726
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RESULT 15

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US-10-398-221-8
; Sequence 8, Application US/10398221
; Publication No. US20040018514A1
; GENERAL INFORMATION:
; APPLICANT: KUNST, Frederik
; APPLICANT: GLASER, Philippe
; TITLE OF INVENTION: Listeria innocua, genome and applications
; FILE REFERENCE: 344 702 - US
; CURRENT APPLICATION NUMBER: US/10398, 221
; CURRENT FILING DATE: 2003-03-27
; PRIOR APPLICATION NUMBER: PCT/FR 01/03 061
; PRIOR FILING DATE: 2001-10-04
; PRIOR APPLICATION NUMBER: FR 00/12 697
; PRIOR FILING DATE: 2000-10-04
; NUMBER OF SEQ ID NOS: 4025
; SOFTWARE: Patentin version 3.0
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; SEQ ID NO 8
; LENGTH: 495269
; TYPE: DNA
; ORGANISM: Listeria innocua
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(end)
; OTHER INFORMATION: n can be any nucleotide: a, g, c or t/u
US-10-398-221-8
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Query Match 38.8%; Score 524; DB 16; Length 495269;

Best Local Similarity 62.4%; Pred. No. 9e-84; Mismatches 505; Indels 1; Matches 838; Conservative 0;

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QY 67 TCATTAGCACAAATCATGATGATTTTAGGCATGAAGTTCAAGGTCAGGATCGGATTTGAGAAC 126
Db 100968 GCACCTTGCTCAGATCCTGCGACGATAAAGGTTTTCAGTGCAAGCGACGATGTAGACAA 101027
QY 127 TACGTATTTACAGAACTTCTCTTAGAATAAGGGGATAAAATATTACCATTTGGTGCT 186
Db 101028 TATTTTTCCAGCAGAAAGCATTTGGAAGAAAACAAATTCATTTAGA-CGTTTTACGG 101086
QY 187 AATAACATAAAGAGATATGTTAGTTTATCAAGSTAAATGCAATTCGCGAGTAGCATGAA 246
Db 101087 GATAATATAAAGAGGCTTAACAATTTATTTGCTGTTAATGCAATTTCCAGATACATGAA 101146
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Sequence	2593, A
Sequence	6020, Ap
Sequence	7268, Ap
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Sequence	4010, Ap

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33	158	6.9	419	4	US-09-198-452A-974
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39	144	6.3	488	3	US-08-984-618-4
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ALIGNMENTS

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RESULT 1
US-09-134-001C-5133
; Sequence 5133, Application: US/09134001C
; Patent No. 6380370
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: GTC-007
; CURRENT APPLICATION NUMBER: US/09/134,001C
; CURRENT FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5674
; SEQ ID NO 5133
; LENGTH: 442
; TYPE: PRT
; ORGANISM: Staphylococcus epidermidis
US-09-134-001C-5133

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Query Match	85.5%	Score	1953;	DB	4;	Length	442;
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Gaps	0;						
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6	MTHYHFVGIKSGMSSLAQITMHDLGHEVQGSDDIESVYFTEVALRNKGIKILPFDANNITK	65					
61	DMVVIQGNAPASGHEEIVRAHQKLKLDVWSYNDLFGQIIDQYTSVAVTGAHGKSTTTGLLS	120					
66	EMVVIQGNAPDNEHEEIVRAHELKLDIIVKHYDFLGHVINOYTSVAVTGAHGKSTTTGLLS	125					
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246	TOFDVYIKGEFYDQFLSPQYGNHINIALAVIAISYLENNVNIKEALITFGCVKRRFN	305					
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306	ETKYSNGVIVDDYAAHPRETSATIDTARKYYPKDVAVFQPHFTFSRTQAFINEFASLS	365					

GenCore version 5.1.6
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sw protein - protein search. using sw model

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perfect score: 2283
perfect score: 1
perfect score: 437

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

total number of tests satisfying chosen parameters: 389414

Minimum DB seq length: 0

Post-processing: Maximum Match 100%
Listing first 45 summaries

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Issued Patents: AA,*
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2: /cgn2_6/ptodata/2/iaa/5B COMB. pep.*
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5: /cgn2_6/ptodata/2/iaa/ECTUS COMB. pep.*
6: /cgn2_6/ptodata/2/iaa/backfiles1. pep.*

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pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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	Score	Match	Length		
1	1953	85.5	442	US-09-134-001C-5133	Sequence 5133, Ap
2	1107	48.5	444	US-08-940-572-2	Sequence 2, Appli
3	1031	45.2	422	US-08-961-083-116	Sequence 116, App
4	1031	45.2	422	US-09-536-784-116	Sequence 116, App
5	966	42.3	291	US-09-107-532A-6914	Sequence 6914, Ap
6	557	24.4	492	US-09-328-352-5023	Sequence 5023, Ap
7	518	22.7	493	US-09-540-236-2712	Sequence 2712, Ap
8	492	21.6	492	US-09-489-039A-12280	Sequence 12280, A
9	481	21.1	513	US-09-252-931A-24136	Sequence 24196, A
10	469	20.5	488	US-09-543-681A-6951	Sequence 6951, Ap
11	464	20.3	812	US-09-198-452A-978	Sequence 978, App
12	412	18.0	475	US-09-328-332-4942	Sequence 4942, Ap
13	388.5	17.0	473	US-09-540-236-2891	Sequence 2891, Ap
14	358.5	15.7	471	US-09-543-681A-5705	Sequence 5705, Ap
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16	263	11.5	494	US-08-984-618-3	Sequence 3, Appli
17	225.5	9.9	97	US-08-940-572-4	Sequence 4, Appli
18	197	8.6	457	US-09-134-001C-3838	Sequence 3838, A
19	196	8.6	283	US-09-252-991A-21952	Sequence 21952, A
20	191	8.4	449	US-09-530-836-2	Sequence 2, Appli
21	190	8.3	46	US-08-936-165A-446	Sequence 446, App
22	187.5	8.2	450	US-08-665-435A-2	Sequence 2, Appli
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24	183.5	8.0	446	US-08-934-481-2	Sequence 2, Appli
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27	179.5	7.9	457	US-09-134-001C-4284	Sequence 4284, Ap

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 DB 366 KADQVFLCEIFGSIENGTDITIEDLINRIDGSTLIDENSIDVLEKFDNAVILFMGAGDI 425
 QY 421 QKLNAYLDKLGKMAF 437
 DB 426 QKLLKAYFEKLGKXDF 442

RESULT 2
 US-08-940-572-2
 ; Sequence 2, Application US/08940572
 ; Patent No. 6310193
 ; GENERAL INFORMATION:
 ; APPLICANT: Wallis, Nicola G.
 ; APPLICANT: Black, Michael T.
 ; APPLICANT: Hodgson, John E.
 ; APPLICANT: Knowles, David J.
 ; APPLICANT: Lonetto, Michael A.
 ; APPLICANT: Nicholas, Richard O.
 ; APPLICANT: Stodola, Robert K.
 ; TITLE OF INVENTION: No. 6310193el MurC
 ; NUMBER OF SEQUENCES: 6
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Dechert, Price & Rhoads
 ; STREET: 4000 Bell Atlantic Tower, 1717 Arch Stre
 ; CITY: Philadelphia
 ; STATE: PA
 ; COUNTRY: USA
 ; ZIP: 19103-2793
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Diskette
 ; COMPUTER: IBM Compatible
 ; OPERATING SYSTEM: DOS
 ; SOFTWARE: FastSeq for Windows Version 2.0
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/940,572
 ; FILING DATE:
 ; CLASSIFICATION: 536
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 60/024022
 ; FILING DATE: 16-AUG-1996
 ; APPLICATION NUMBER: US 08/889711
 ; FILING DATE: 08-JUL-1997
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Dickinson, Q. Todd
 ; REGISTRATION NUMBER: 28,354
 ; REFERENCE/DOCKET NUMBER: P50533-04
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 215/994-2252
 ; TELEFAX: 215/994-2222
 ; TELEX:
 ; INFORMATION FOR SEQ ID NO: 2:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 444 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ;
 ; US-08-940-572-2
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 ; Query Match 48.5%; Score 1107; DB 4; Length 444;
 ; Best Local Similarity 49.8%; Pred. No. 9.4e-102;
 ; Matches 213; Conservative 79; Mismatches 132; Indels 4; Gaps 4;
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 DB 245 TFTVHFRGNLQGFHPTFGRHNINWATAVIGLLTAGFDLNLVREHLKTFAGVKKRFT 304
 QY 302 TTIANQVIVDDYAHHPREISATIDTARKYPHKVVAVPQHTFSTQAFILNEFAESLCK 361
 DB 305 KIVNDTVIIDDFAHPTBELIATLDAARQKYPKSVAVPQHTFTFTTIALDDFAHALNQ 364
 QY 362 ADRVFLCEIFGSIRE-NSGALTIOIDLKIGAS-SPINEDLNVLQPOFNNAVLFMGAGD 419
 DB 365 ADVVLAQYGSAREVDHGVKVEDLANKKKHQVITVENVSPLLDHNDNAVYFMGAGD 424
 QY 420 IQKLQNAV 427
 DB 425 IQTYEYSP 432

RESULT 3
 US-08-961-083-116
 ; Sequence 116, Application US/08961083
 ; Patent No. 6159469
 ; GENERAL INFORMATION:
 ; APPLICANT: Choi et. al.
 ; TITLE OF INVENTION: Streptococcus pneumoniae Antigens and Vaccines
 ; NUMBER OF SEQUENCES: 452
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Human Genome Sciences, Inc.
 ; STREET: 9410 Key West Avenue
 ; CITY: Rockville
 ; STATE: Maryland
 ; COUNTRY: USA
 ; ZIP: 20850
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Diskette, 3.50 inch, 1.4Mb storage
 ; COMPUTER: HP Vectra 486/33
 ; OPERATING SYSTEM: MSDOS version 6.2
 ; SOFTWARE: ASCII Text
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/961,083
 ; FILING DATE:
 ; CLASSIFICATION: 435
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER:
 ; FILING DATE:
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Brookes, A. Anders
 ; REGISTRATION NUMBER: 36,373
 ; REFERENCE/DOCKET NUMBER: PB340P2
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (301) 309-8504
 ; TELEFAX: (301) 309-8512
 ; INFORMATION FOR SEQ ID NO: 116:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 422 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: protein
 ;
 ; US-08-961-083-116
 ;
 ; Query Match 45.2%; Score 1031; DB 3; Length 422;
 ; Best Local Similarity 48.8%; Pred. No. 3.3e-94;
 ; Matches 200; Conservative 75; Mismatches 131; Indels 4; Gaps 4;
 ;
 ; 22 HDLGHVEVQSDIENVVTFEVALRNKGKILPFGANNIKEDMVVLOGNAF-ASSHEEIVRA 80

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RESULT 4
US-09-536-784-116
; Sequence 116, Application US/09536784
; Patent No. 6573082
; GENERAL INFORMATION:
; APPLICANT: Choi et. al.
; TITLE OF INVENTION: Streptococcus pneumoniae Antigens and Vaccines
; NUMBER OF SEQUENCES: 452
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Human Genome Sciences, Inc.
; STREET: 9410 Key West Avenue
; CITY: Rockville
; STATE: Maryland
; COUNTRY: USA
; ZIP: 20850
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.50 inct, 1.4MB storage
; COMPUTER: HP Vectra 486/33
; OPERATING SYSTEM: MSDOS version 6.2
; SOFTWARE: ASCII Text
; CURRENT APPLICATION NUMBER: US/09/536,784
; FILING DATE: 30-Oct-1997
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/961,083
; FILING DATE: OCT-30-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Michelle S. Marks
; REGISTRATION NUMBER: 41,971
; REFERENCE/DOCKET NUMBER: PB340P3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (301) 309-8504
; TELEFAX: (301) 309-8512
; INFORMATION FOR SEQ ID NO: 116:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 422 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 116:
US-09-536-784-116

```

HYPOTHETICAL: YES
ORIGINAL SOURCE: Enterococcus faecium
FEATURE:
NAME/KEY: misc feature
LOCATION: (B) LOCATION 1...291
SEQUENCE DESCRIPTION: SEQ ID NO: 6914
US-09-107-532A-6914

Query Match 42.3%; Score 966; DB 4; Length 291;
Best Local Similarity 63.8%; Pred. No. 5.5e-88;
Matches 178; Conservative 42; Mismatches 59; Indels 0; Gaps 0;

Db 4 YHFGVIGKSGMSLAQIMHDLGHEVQSGDIENVVFEVALRNGKIKILPFGANNIKEDMV 63
13 YHFGVIGKSGMSLAQIMHDLGHEVQSGDIENVVFEVALRNGKIKILPFGANNIKEDMV 72
64 VIQGNAPASSHEEIVRAHQKLDVSYNDFLGQIIDQYTSVAVTGAGHKTSTTGLLSHYM 123
73 ILAGNAPDSHEEIVRAHQKLDVSYNDFLGQIIDQYTSVAVTGAGHKTSTTGLLSHYM 132
124 NGDKKTSFLIGDGTGMLPESDYFAFEACEYRRHFLSYKPDYAIMNIDFDHDPDYKDN 193
133 SGVRPTSYLIGDGTGMLPESDYFAFEACEYRRHFLSYKPDYAIMNIDFDHDPDYKDN 192
184 DYFDAPCEMAHNVKGLIAGWDDHRLKTEADVPYIYVYFGKSDDIYAQMIQITDKGTAF 243
193 DVFATQWAGQVKKALFAYGDDAYLRKLANVPYIYVYFGKSDDIYAQMIQITDKGTAF 252
244 DVVVDGEFYDHFSLPQYGDHVTNLAIAVIAISYLEKLDV 282
253 DVVHGEFYDHFSLPQYGDHVTNLAIAVIAISYLEKLDV 291

RESULT 6
US-09-328-352-5023
; Sequence 5023, Application US/09328352
; Patent No. 6562958
; GENERAL INFORMATION:
; APPLICANT: Gary L. Breton et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
; FILE REFERENCE: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
; CURRENT APPLICATION NUMBER: GTC99-03PA
; CURRENT FILING DATE: 1999-06-04
; NUMBER OF SEQ ID NOS: 8252
; SEQ ID NO 5023
; LENGTH: 492
; TYPE: PRT
; ORGANISM: Acinetobacter baumannii
US-09-328-352-5023

Query Match 24.4%; Score 557; DB 4; Length 492;
Best Local Similarity 33.1%; Pred. No. 7.7e-47;
Matches 150; Conservative 83; Mismatches 176; Indels 44; Gaps 13;

Db 3 YHFGVIGKSGMSLAQIMHDLGHEVQSGDIENVVFEVALRNGKIKI-LPFGANNIKED 61
34 HLFVIGGAGMGCGIAEVLANQGVYVVTGSDIKANAMTE-RLENLGVTVHVGHDASNIKMAV 92
62 MVVIQGNAPASSHEEIVRAHQKLDVSYNDFLGQIIDQYTSVAVTGAGHKTSTTGLLSH 121
93 NVLVVSTPAIDPENPEVKAATEORIPYVRAEMGLMRYRHGIAVAGTHGKTSTTGLT 152
122 VMGDK-KTSFLIG-----DGTGMLPESDYFAFEACEYRRHFLSYKPDYAIMNIDFDH 175
153 MIAEENLDPTVYVIGLLNLTGVNAALGESRFVIAEADSDASFLSLRPMACVVTNIDEDH 212
176 PD-YFKDINDVDFAPCEMAHNVK-KGI-IAGWDDHRLKTEADV--PIYVYFGKSDDIY 230
213 MDYVEGDFDKLKTFFVQFLHNLDPYGLAVVGGDDANREILPRVGRPVITYGNEENDIR 272
231 AQNTQITDKGTAFVY 290

Db 273 AIDVEQDGMRSHTVLRKREPLRLTINQPLHNLNALAAIGVATDEGVSDAISRALK 332
Qy 291 TFGGVKRRFN-----ETTIANQVIVDDYAHHPREISATIDTARKKYPKHEVAVFOPHTF 345
Db 333 GFSGVGRFRFQVQGEFBLGEGNVKLVDYDGHHPKVEATIKAAQSHPRDRLEVMFQPHRY 392
Qy 346 SRTQAFNEFAESLCKADRVFLCEIF-----GSIRENSGALTQDLIDK 389
Db 393 SRTDCDFDFIEVLSQVQDQLLLELVYPAGEKPIVGADSRTLARSIRLARGOVEPI--LIDP 450
Qy 390 IGGASFINEDLINVLEQF--DNAVILFPMGAGDI 420
Db 451 VEG-----NLQIMQNVLPQNDLLLTQAGNV 477

RESULT 7
US-09-540-236-2712
; Sequence 2712, Application US/09540236
; Patent No. 6673910
; GENERAL INFORMATION:
; APPLICANT: Gary L. Breton et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO MORAXELLA CAT
; FILE REFERENCE: FOR DIAGNOSTICS AND THERAPEUTICS
; CURRENT APPLICATION NUMBER: US/09540,236
; CURRENT FILING DATE: 2000-04-04
; NUMBER OF SEQ ID NOS: 3840
; SEQ ID NO 2712
; LENGTH: 493
; TYPE: PRT
; ORGANISM: M.cattarrhalis
US-09-540-236-2712

Query Match 22.7%; Score 518; DB 4; Length 493;
Best Local Similarity 31.6%; Pred. No. 6e-43;
Matches 144; Conservative 78; Mismatches 187; Indels 46; Gaps 13;

Qy 5 HFVIGKSGMSLAQIMHDLGHEVQSGDIENVVFEVALRNGKIKI-LPFGANNIKEDMV 63
Db 34 HLFVIGGAGMGCGIAEVLANQGVYVVTGSDIKANAMTE-RLENLGVTVHVGHDASNIKMAV 92
64 VIQGNAPASSHEEIVRAHQKLDVSYNDFLGQIIDQYTSVAVTGAGHKTSTTGLLSHYM 123
Db 93 VVSSAIDRONPEIRAALKAHIPVVRADMLGELMRYRHGIAVAGHKTSTTGLTMM 152
Qy 124 -NGDKKTSFLIG-----DGTGMLPESDYFAFEACEYRRHFLSYKPDYAIMNIDFDORP 177
Db 153 TEAGLDPTVYVIGKLNAGKNAALGASRYLVARADESDASFLSLRPMACVVTNIDEDHME 212
Qy 178 -YFKDINDVDFAPCEMAHNVK-KGI-IAGWDDHRLKTEADV--PIYVYFGKSDDIY 232
Db 213 TYEGSFDKLAQVYVQFLHNPFFYGLAVLCGDDKELYAMIDDIAEPVITYGLEKENDV--- 269
Qy 233 NIQITDKGTAFVY 280
Db 270 -----QAVDVIA DGT-KTHFTVLRKDKKLPITINIFGIHNVYALGALTATDEGV 320
Qy 281 DVTNIKKALTEFGVKKERENET-----TIANOVIVDDYAHHPREISATIDTARKKYPH 333
Db 321 SDKAIQAVKPKFAGVGRFENNNSYPLTDSGDVLLDYGHHTEAMTIKAAQSQYD 380
Qy 334 KEVAVFQPHFTSRTQAFNEFAESLCKADRVFLCEIFGSIRESNGALTQDLIDKTKGGA 393
Db 381 RLVMFMFQPHRYSTRDCFSFVNVLVSQDKLJLLDVYSAGEELIKGATSNLARSIR 440
Qy 394 SFNEDLINV--LEQFDNAVVLPMGAGDIQKQNA 426
Db 441 GOVEPIVLNVNDKEQITQVLKLTINANDLLMTQGA 475

RESULT 8
US-09-489-039A-1228C

```
; Sequence 12280, Application US/09489039A
; Patent No. 6613836
; GENERAL INFORMATION:
; APPLICANT: Gary Berton et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
; TITLE OF INVENTION: PNEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 2709.2004001
; CURRENT APPLICATION NUMBER: US/09/489,039A
; CURRENT FILING DATE: 2000-01-27
; PRIOR APPLICATION NUMBER: US 60/117,747
; PRIOR FILING DATE: 1999-01-29
; NUMBER OF SEQ ID NOS: 14342
; SEQ ID NO 12280
; LENGTH: 492
; TYPE: PRT
; ORGANISM: Klebsiella pneumoniae
US-09-489-039A-12280

Query Match      21.6%; Score 492; DB 4; Length 492;
Best Local Similarity 29.6%; Pred. No. 2.3e-40;
Matches 138; Conservative 86; Mismatches 182; Indels 60; Gaps 13;

QY      3  HYHFGVIGKSGMSLAQIMHDLGHEVQSGSDIENYVTFEVALRNKGKIKLPFGA----- 55
DB      22  HIHFVIGGAGMGGAIEVLNGLYGVSGSDLPAPNVITQ-----QLSQLGATYIFNHR 73

QY      56  -NNIKEDMVVQGNAPASSHEEIVRAHQKLDVSYNDFLGOIIDQYTSVAVTGAHGKTS 114
DB      74  PENVRDASVVVVSSAISADNPETVAEAEARIPVIRRAEMLAELMRFRHGAIAAGTHGKT- 133

QY      115  TTGGLSHV-----MNGDKTSLIGDGTGMGLPESDYFAFAACEYRRHFLSKPD 164
DB      134  TTAMVSIIYAEAGLDPTFVNG-----GLVKAAGVIAELCHSKSYLLAEADESDASFLHQP 189

QY      165  YAIMNTICDFHPD--YFKDINDVDFAPQEMAHNVK--KGIANGDDEHLRKTEADV--PIY 219
DB      190  VAIVTNEADHMDTYGDFENKLGKTFINFLNLPFYGRAVNCVDDPVIRELLPRVGRQIT 249

QY      220  YGFKSDSDIYAQNI--QITUKGTAFDVYVDGEFFDHLSPQYGDHTVLNALAVIAISYLE 278
DB      250  TYGFSDDADVRVEDYRQVGAQGHFLVRQDKAILQVTLNAP--GRHINALAAAVATEE 308

QY      279  KLVNTNKEALETFGGVKRRFN---ETTIA-----NQVIWDYAHHPREISATIDTAR 328
DB      309  GIDDRALIRALESGQGRDFDFLGEPLAEVNGKPSAMLIDYGHPTFVDTIKKAR 368

QY      329  KKYPHKEVAVFQPHFTRTOAFNLNEFAESLCKADRVFLCEIFGSIRESNGALTIQDLID 388
DB      369  AGWFDKLVVVFQPHRYTRTRDLVDYDDFANVLTVQDALLMLDVYPAGEAPIPGADSRSLCR 428

QY      389  KIGASFIN-----EDLINVLEQCFNAVILFMGAGDIQKL 423
DB      429  TIRGRGVDPILVPSDAQAEMLASVLT--GNDLVLVQAGNIGKI 472

RESULT 9
US-09-252-991A-24196
; Sequence 24196, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 24196
; LENGTH: 513
```

```
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-24196

Query Match      21.1%; Score 481; DB 4; Length 513;
Best Local Similarity 30.9%; Pred. No. 3.1e-39;
Matches 146; Conservative 80; Mismatches 195; Indels 52; Gaps 14;

QY      5  HFVGIXGSGMSLAQIMHDLGHEVQSGSDIENYVTFEVALRNKGKIKLPFGANNIKEDMV 63
DB      52  HFVIGGAGMGGAIEVLNGLYGVSGSDLKASAVTE--RLEKFGAQIFIGHQAEADGADV 110

QY      64  VIQGNAPASSHEEIVRAHQKLDVSYNDFLGOIIDQYTSVAVTGAHGKTSITGLSHVM 123
DB      111  LVVSSAINRANPEVASALERIRIPVWPEAEMLAEMLRYRHGIAVAGTHGKTITTSIASVF 170

QY      124  -NGDKTSLIGD-----GTGMCGLPESDYFAFAACEYRRHFLSKPDVAIANTIDDFKH-P 176
DB      171  AAGGLDPTFVIGGRKLNAAAGTNAQLGASKYLVAEADESDASELHLOPMVAVVTNIDAEHA 230

QY      177  DYPKDIINDVDFAPQEMAHNVK--KGI-IAWGDDEHLRKTEADV--PIYVYGKSDSDIY 232
DB      231  TYGDFPNKXKTKTFVEFLNLPFYGLAVNCVDDPVVREILPQIARPTVTYGLSEADAVRAI 290

QY      233  NIQTIDKGTAPDVVDGEFFDHLSPQY-----GDHTVLNALAVIAISYLEKLDV 262
DB      291  NIROEGMRTWFTV-----LRPEREPLDVSNMPLGNHVLNLSLTIATIDEGISD 340

QY      283  TNIXEALTEFGVKRRFN---ETTIANOVIVDDYAHHPREISATIDTARKKYPHKEVV 337
DB      341  EATVQGLSGFGVGRRFQVYGELOVGGSVMLVDDYGHHPREVAIVKAIKRGWPFERRLV 400

QY      338  AVFQPHFTRTOAFNLNEFAESLCKADRVFLCEIFGSIRESNGALTIQDLKIGASFI- 396
DB      401  MVYQPHRYTRTRDLVDYDDFANVLNLLMEVVPAGEEPIPGADSRQLCHSIRQRGOLD 460

QY      397  -----NEDLINVLEQCFNA--VVLFMGAGDI-----QKLVNAYLDKLGKNA 436
DB      461  PIYFERDACLAPLVKPLLRAGDILLCCQAGSGVGGGLAPQLIKNPLFAGKGGKA 513

RESULT 10
US-09-543-681A-6951
; Sequence 6951, Application US/09543681A
; Patent No. 6605709
; GENERAL INFORMATION:
; APPLICANT: GARY BERTON
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PROTEUS MIRABI
; TITLE OF INVENTION: DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 2709.1002-001
; CURRENT APPLICATION NUMBER: US/09/543,681A
; CURRENT FILING DATE: 2000-04-05
; PRIOR APPLICATION NUMBER: US 60/128,706
; PRIOR FILING DATE: 1999-04-09
; NUMBER OF SEQ ID NOS: 8344
; SEQ ID NO 6951
; LENGTH: 488
; TYPE: PRT
; ORGANISM: Proteus mirabilis
US-09-543-681A-6951

Query Match      20.5%; Score 469; DB 4; Length 488;
Best Local Similarity 28.3%; Pred. No. 4.5e-38;
Matches 136; Conservative 84; Mismatches 171; Indels 90; Gaps 15;

QY      3  HYHFGVIGKSGMSLAQIMHDLGHEVQSGSDIENYVTFEVALRNKGKIKLPFGA----- 55
DB      22  HIHFVIGGAGMGGAIEVLNGLYGVSGSDLPAPNVITQ-----QLVAGLTIYFNRH 73

QY      56  -NNIKEDMVVQGNAPASSHEEIVRAHQKLDVSYNDFLGOIIDQYTSVAVTGAHGKTS 114
DB      74  PENIRDASVVVVSTALSDNPETVAEAEARIPVIRRAEMLAELMRFRHGAIAAGTHGKT 133
```

115 TTGLLSHV-----MNGDKKTSFLIGDGTGMLPESDYFAFAEACEYRRHFLSYKPD 164
134 TTAMISNIYAQAGLDPTFVNG---GLVKSAGTARLCCSYLIAADESASFHLQPM 189
165 YAIMTNDIDFHPD-YFKDINDVDFDAFQMAHNVKKGIIANG-----DDEHLRKTIEADVP 217
190 VAVVTNIEADRMVDYHGDFNLKETFIITLNLN-----FYGRAVMCIDDEVIIRSLIPKVG 245
218 IYY--YGFKSDSDIYAQNIQTIDKGTGTA-----FDYVDGEFYDFHFLSPQYGDH 263
246 RYITTYGFESEDADVRAITHYE--QKGAQGFFTISREDMPDIDVTMAP-----GRH 293
264 TVINNALAVIASYLEKLDVNTNKEALETFEGVKKRFN-----ETTIANOVIVDDY 313
294 NALNATAAVAVATEBEGIADEHILALINLFGTGRFDFLGNFSLHVGQGEVWLVDDY 353
314 AHPHREISATIDTARKKYPHKEVAVVQFHTPSRTQAFNLNEFAESLCKADRVFLCEIFGS 373
354 GHPTVEVATIKAAAGAPDKELNMLFQPHRYTRTRDLYEDFATVLNQVDILLTIVYAA 413
374 -----IRENSGALTIDQIDKIL--GGASFINEDLINVLQEDFNAVLFMGAGDIQK 422
414 GEAPITGADSRSLCRTIRQGRKLDPIWSDVENISSILAGVLT--DNDLVLVQAGNIGOK 471
423 L 423
472 I 472

RESULT 11
US-09-198-452A-978
; Sequence 978, Application US/09198452A
; Patent No. 6559294
; GENERAL INFORMATION:
; APPLICANT: Griflais, R.
; TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragments
; TITLES OF INVENTION: thereof and uses thereof, in particular for the diagnosis, prevention
; TITLES OF INVENTION: and treatment of infection
; FILE REFERENCE: 9710-003-999
; CURRENT APPLICATION NUMBER: US/09/198,452A
; CURRENT FILING DATE: 1998-11-24
; NUMBER OF SEQ ID NOS: 6849
; SEQ ID NO 978
; LENGTH: 812
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-09-198-452A-978

Query Match 20.3%; Score 464; DB 4; Length 812;
Best Local Similarity 28.0%; Pred. No. 3.2e-37;
Matches 130; Conservative 91; Mismatches 180; Indels 64; Gaps 16;
4 YHFGVIGKSGMSSLAQIMHDLGHEVQSDI--ENVVTEVALRNGKIKLP-FCANNIKED 61
10 YHFIGGIGMSALAHILLDRGYEVSGSDLYSY--TIESLKAKGARCFCPSGHDSSHVPHD 67
62 MVVIOQNAFASHEEIVRAHQKLDVVSYNDFLQGIIDQYTSVAVTGAHKTSTTGLLH 121
68 AVVYSSSIAPDNVEYLTATQSRSLIHRALSLQMLMEGYESILVSGSHKTUTSSLIRA 127
122 V-MNGDKKTSFLIGDGTGMLP-----ESDYFAFAEACEYRRHFLSYKPYAIMTNI 171
128 IFQEAQKDPYAG-----GLAANCLNGYSSSKIFVAEADSDSLKHYTPRAVITNI 182
172 DFPH-PDYFKDINDVDFDAFQMAHNVKKGIIANGDDEHLRKTIEADVP-----YYY 221
183 DNEHLNNAAGNLDNLVQVQD=SRKV-----TDLNKFVYNGDCPILKGNVQGISY 232
222 GFKSDSDIYAQNIQTIDKGTAFDVYVDGEFYDFHFLSPQY-----GDHVLNALAVIA 273
233 GY--SPECQLHIVSYNOKAW-----QSHFSFTFLGQEQDIELNLFQGNNAWAAACG 284
274 ISYLEKLDVNTNKEALETFEGVKKRFNETTIANQ-VIYDDYVAHPHREISATIDTARKKYP 332

285 VALTFGIDINIIIRKALKKPSGVHRRLERKNISESFLEFDYAHHPVEVAHTLRSVRDVG 344
333 HKEVVAVQPTFTRTQAFNLNEFAESLCKADRVFLCEIFGSIRENSGALTIDQIDKIGG 392
345 LRRVIAIFQPHRFSLEECLOTFPKAFQEADEVILTDVYSAGESPRESIILSDLAEQIRK 404
393 ASFI-----NEDLINVLEQF--DNAVLFMGAGDIQKLNAYLD 429
405 SSYVHCYVPHGDIVDYLNRVIRIHDVCSLGGAGNIYTIAGEALKD 449

RESULT 12
US-09-328-352-4942
; Sequence 4942, Application US/09328352
; Patent No. 6562958
; GENERAL INFORMATION:
; APPLICANT: Gary L. Breton et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
; TITLE OF INVENTION: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: GTC99-03PA
; CURRENT APPLICATION NUMBER: US/09/328,352
; CURRENT FILING DATE: 1999-06-04
; NUMBER OF SEQ ID NOS: 8252
; SEQ ID NO 4942
; LENGTH: 475
; TYPE: PRT
; ORGANISM: Acinetobacter baumannii
US-09-328-352-4942

Query Match 18.0%; Score 412; DB 4; Length 475;
Best Local Similarity 29.0%; Pred. No. 2.1e-32;
Matches 134; Conservative 75; Mismatches 203; Indels 50; Gaps 15;
3 HYHFGVIGKSGMSSLAQIMHDLGHEVQSDIENVVTEVALRNGKIKLP-FCANNIK-- 59
20 HLHILGICGTFCMSLALARDLCHKVTGSDSNVYPPMSTQLENAGIELMQGYDRSHLQPH 79
60 EDVAVIQNNAFASHEEIVRAHQKLDVVSYNDFLQGIIDQYTSV-AVTGAHKTSTTGL 118
80 PDLVIV-GNAMKESGIDAVEVMLNEGLPYISGPGQFLADHVLQGHVGVAGTHGKTTTMM 138
119 LSHVMN-GDKTSPFLIGDGTGMLPES-----DYFAFAEACEY-----RRHFLSYKPD 164
139 LAWLIDQAGLNPGLIG-GVPLGFSESRIGGGKGYFVWEADYDSAFDCKRSKRFVHHPK 197
165 YAIMTNDIDFHPDYEKIDINDVDFDAFQMAHNV--KKGIILAWGDDEHLRKTIEADVP 219
198 TAILNNLEFDHADIFDDLAAIQFHLVRTIPSEGRLLIAPITETHIDEVLEMGCTWPI 257
220 YGFKDSDDIYAQNIQTIDKGTAFDVYVDGEFYDFHFLSPQYGDHVLNALAVIAISYLEK 279
258 RTSLEANEKAALSABLISIDGSHFKVLENGNVIGEVKWSMTGQHSVANALATIAAAQHV 317
280 LDVTNIKEALETFEGVKKRFNETTIANQV-IYDDYVAHPHREISATIDTARKKYPKEVVA 338
318 VSLEKACEALSNGFGVKKRMELGTINGIEVDYDFAHHTAIDTTTLOAKRIGERRLWA 377
339 VFQPHFTS-RTQAFNLNEFAESLCKADRVFLCE-----IFGSIRENSGALTIDQID 386
378 IIPSRNTMNGSHKQGLARSARLADDEVIVQFEGLDWDLDQPVIEAATNAQVSRSLDEI 437
387 IDKIGGASFINEDLINVLQEDFNAVLFMG--AGDIQKLNQ 426
438 IDRI-----VNEAGEGDVAVIMSGFGGLGHQKLMASA 469

RESULT 13
US-09-540-236-2891
; Sequence 2891, Application US/09540236
; Patent No. 6673910
; GENERAL INFORMATION:
; APPLICANT: Gary L. Breton et al.

; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO MORAXELLA CATAR
 ; FILE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS
 ; FILE REFERENCE: 2709.2005-001
 ; CURRENT APPLICATION NUMBER: US/09/540,236
 ; CURRENT FILING DATE: 2000-04-04
 ; NUMBER OF SEQ ID NOS: 3840
 ; SEQ ID NO 2891
 ; LENGTH: 473
 ; TYPE: PRT
 ; ORGANISM: M. catarrhalis
 US-09-540-236-2891

Query Match 17.0%; Score 388.5; DB 4; Length 473;
 Best Local Similarity 27.4%; Pred. No. 4.6e-30;
 Matches 135; Conservative 79; Mismatches 179; Indels 99; Gaps 21;
 QY 3 HHHFVGIKSGMSSLAQIMHDLGHEVQSGDIENYVFEVALRNKGIKILP-FGANNI--K 59
 Db 15 HHHILGICGTFMGSLALLARDLGHVTVGSDANIYPPMSTQLADAGVEWEGYHAEHLPT 74
 QY 60 EDMVVIQGNAPASSHEEIVRAHQKLDVSYNDPLGQII--DQVTSVAVTGAHGKSTTTG 117
 Db 75 EDLIVV-GNACKRGMPAIEYMLNERLPYTSQPFLYETVLKDRHV-LAVAGTHGKTTITT 132
 QY 118 LLSHVMN-GDKTSLFLIGDGTGMLPESD-----YFAFEACEY----- 154
 Db 133 MLAWILOFGSDIGTGLIG--GVPLVNTDORRLSLAFQHSYLGKQFEVIEADYDSAFP 189
 QY 155 --RRHFLSYKPDVAMTNIDFDHPDYFKINDVDFAFQEMAHNV-KGIIAWGDDEHLRX 211
 Db 190 DXKSKFVHYPTTALLNLEYDHADIADLDIAIQTFHMRIMPSKQII----- 240
 QY 212 IEADVPIYYGFKDSDDIYAQNIQIT-DKG---TAFDYYVDGE-----FYD 253
 Db 241 IPANTP-----SUETILDKGWTTVWRTSLNGDAEWQAKLDANDGSSFW 285
 QY 254 HFLS-----POYGDHVTNLNAVAISYLEKLDVNIKEALETFGGVKKRRFNETTIAN 306
 Db 286 HENNTSAMRWMSGLHNVNALLTAIAAHVGVSVEMACTALSHFGIKRRMELIGDWD 345
 QY 307 QVIV-DVYAHHPREISATIDTARKKYPEKEVAVFQHTFS-RTQAFILNEFAESLCKADR 364
 Db 346 DILVDFDFAHPTALSTLDCAKRLPRRIWALIEPSNTKLSHRPHLAASAAIADQ 405
 QY 365 VFLCEIFG---SIRENSGALTIQDLIDKIGGASFINELINVLQFDNA--VVLPMGAGD 419
 Db 406 VIWYEPQGLTWGLKEAIGSTPNQVLDISINA-----IIHIIKTYAKAGDAIIIMSNGD 458
 QY 420 IQKLNAYLDKL 431
 Db 459 FENTHGRLLDAL 470

RESULT 14
 US-09-543-681A-5705
 ; Sequence 5705, Application US/09543681A
 ; Patent No. 6605709
 ; GENERAL INFORMATION:
 ; APPLICANT: GARY BRETON
 ; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PROTEUS MIRABIL
 ; FILE OF INVENTION: DIAGNOSTICS AND THERAPEUTICS
 ; FILE REFERENCE: 2709.1002-001
 ; CURRENT APPLICATION NUMBER: US/09/543,681A
 ; CURRENT FILING DATE: 2000-04-05
 ; PRIOR APPLICATION NUMBER: US 60/128,706
 ; PRIOR FILING DATE: 1999-04-09
 ; NUMBER OF SEQ ID NOS: 8344
 ; SEQ ID NO 5705
 ; LENGTH: 471
 ; TYPE: PRT
 ; ORGANISM: Proteus mirabilis
 US-09-543-681A-5705

Query Match 15.7%; Score 358.5; DB 4; Length 471;
 Best Local Similarity 27.1%; Pred. No. 4.4e-27;
 Matches 128; Conservative 79; Mismatches 198; Indels 67; Gaps 19;
 QY 3 HHHFVGIKSGMSSLAQIMHDLGHEVQSGDIENYVFEVALRNKGIKILP-FGANNI-- 59
 Db 14 HHHILGICGTFMGSLALLARAKGHVTVGSDANIYPPMSTLLENQIGIELIEGIDFQQLLEPA 73
 QY 60 EDMVVIQGNAPASSHEEIVRAHQKLDVSYNDPLGQII--DQVTSVAVTGAHGKSTTTGL 118
 Db 74 PDWVII-GNAMTRGNPCVEAVLEKGLPYTSGPQWLHDYILPERVWLVAVAGTHGKTTIAGM 132
 QY 119 LSHVMNG-DKTSFLIGDGTG-----MGLPESDYFAFEACEY-----RRHFLSYKPDY 165
 Db 133 LAWILEDCGQPGFLIGGVPCNFQVSAQLGSPFPFVIEADEYDSAFFDKRSKFHYSPRT 192
 QY 166 AIMTNDIFDHPDYFKINDVDFAFQEMAH-----NVKK--GIIAWGDDEH 208
 Db 193 LILNLEFHDADIPDDLTAT:QKQPHLVRIVPGSGKIMPNDOLNLEKOTIGMGCWSEEB- 251
 QY 209 LRKTEADVPIYYGFKDSDDIYAQNIQITDKGTAFDYYVDGEFYDHFILSPQYGDHVTILNA 268
 Db 252 -----YTG--BTGDWQAK--KLSDSSHFVAFHKGCEQVGEVCMGLSGEHNMQNG 296
 QY 269 L-AVIAISYLEKLDVNIKEALETFGGVKKRRFNETTIANQV-IVDDYAHHPREISATIDT 326
 Db 297 LMAIVAHHVGVLPV-DACAALNKFINARRELELRGEVNOVSVYDDFAHPTAILATLLEA 355
 QY 327 ARKKY-PHEKVVAVFQHTFSRTQAF-LNEFAESLCKADRVLCEIFGSIENSALATIQ 384
 Db 356 LRKVGSTARTIAVLEPRSTNWKMGISKDDIAPALGRADEVFL-----FQPPNQLWLS 409
 QY 385 DLIDKIGGASFINELINVLQFDNAV-----VLFMGAGDIQKLNAYLDKL 431
 Db 410 DIAREKQVPARWSTIDITLVEWAKAKEPGBHILMNSGGFGGIEHKLAKL 461

RESULT 15
 US-09-489-039A-8987
 ; Sequence 8987, Application US/09489039A
 ; Patent No. 6610836
 ; GENERAL INFORMATION:
 ; APPLICANT: Gary Breton et. al
 ; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
 ; FILE OF INVENTION: PNEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS
 ; FILE REFERENCE: 2709.2004001
 ; CURRENT APPLICATION NUMBER: US/09/489,039A
 ; CURRENT FILING DATE: 2000-01-27
 ; PRIOR APPLICATION NUMBER: US 60/117,747
 ; PRIOR FILING DATE: 1999-01-29
 ; NUMBER OF SEQ ID NOS: 14342
 ; SEQ ID NO 8987
 ; LENGTH: 458
 ; TYPE: PRT
 ; ORGANISM: Klebsiella pneumoniae
 US-09-489-039A-8987

Query Match 15.3%; Score 348.5; DB 4; Length 458;
 Best Local Similarity 27.6%; Pred. No. 4.2e-26;
 Matches 129; Conservative 79; Mismatches 207; Indels 53; Gaps 19;
 QY 5 HHHFVGIKSGMSSLAQIMHDLGHEVQSGDIENYVFEVALRNKGIKILP-FGANNI--KED 61
 Db 5 HHLGICGTFMGSLALLARSLRSLGHEVTVGSDANIYPPMSTLLENQIGIDILQGYDPSQLEPRD 64
 QY 62 MVVIQGNAPASSHEEIVRAHQKLDVSYNDPLGQII--DQVTSVAVTGAHGKSTTTGL 119
 Db 65 LVIL-GNAMTRGNPCVEAVLENNIPYMSGPQLHDFVLRDRW-LAVAGTHGKTTIAGMA 122
 QY 120 SHVMNG-DKTSFLIGDGTG-----MGLPESDYFAFEACEY-----RRHFLSYKPDYA 166
 Db 123 TWILRACGYKPGFVIGVPGNFDVSARIGDSPPFVIEADEYDCAFFDKRSKFHYCPRTL 182

GenCore version 5.1.1.6
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OM protein - protein search, using sw model

Run on: June 25, 2004, 08:54:16 ; Search time 48 Seconds
(without alignments)
2570.230 Million cell updates/sec

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Perfect score: 2283
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Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1163542 seqs, 282313646 residues
Total number of hits satisfying chosen parameters: 1163542

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published Applications AA:*

- 1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
- 2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
- 3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
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- 13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep.*
- 14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep.*
- 15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
- 16: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
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- 18: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	2246	98.4	437	9	US-09-815-242-5297 Sequence 5297, Ap
2	2246	98.4	444	9	US-09-815-242-12293 Sequence 12293, A
3	2239	98.1	437	12	US-10-282-122A-43780 Sequence 43780, A
4	2238	98.0	437	9	US-09-925-637-2 Sequence 2, Appli
5	2238	98.0	437	14	US-10-084-205-2 Sequence 2, Appli
6	2238	98.0	437	16	US-10-712-713-2 Sequence 71178, A
7	1952	85.5	437	12	US-10-282-122A-71178 Sequence 46331, A
8	1446	63.3	436	12	US-10-282-122A-46331 Sequence 57306, A
9	1430.5	62.7	445	12	US-10-282-122A-57306 Sequence 10870, A
10	1425.5	62.4	456	9	US-09-815-242-10870 Sequence 57651, A
11	1389	60.8	444	12	US-10-282-122A-57651 Sequence 60988, A
12	1327	58.1	447	12	US-10-282-122A-60988 Sequence 74395, A
13	1131	49.5	442	12	US-10-282-122A-74395 Sequence 72179, A
14	1126.5	49.3	443	12	US-10-282-122A-72179 Sequence 13507, A
15	1107	48.5	444	9	US-09-815-242-13507 Sequence 12993, A

16	1107	48.5	444	12	US-10-282-122A-74073
17	1040	45.6	246	12	US-10-282-122A-71315
18	1031	45.2	422	9	US-09-765-272-116
19	684.5	30.0	461	12	US-10-282-122A-52628
20	637.5	27.9	458	12	US-10-282-122A-51682
21	592.5	26.0	450	12	US-10-282-122A-53624
22	557	24.4	482	12	US-10-282-122A-44665
23	546	23.9	469	12	US-10-282-122A-61427
24	543	23.8	506	12	US-10-282-122A-60600
25	538	23.6	469	12	US-10-282-122A-65124
26	530	23.2	468	12	US-10-282-122A-47281
27	518	22.7	486	12	US-10-282-122A-63073
28	504.5	22.1	488	12	US-10-282-122A-51373
29	500	21.9	479	12	US-10-282-122A-69707
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31	498	21.8	491	12	US-10-282-122A-55678
32	494	21.6	485	12	US-10-282-122A-50582
33	492	21.6	491	12	US-10-282-122A-59579
34	489	21.4	833	12	US-10-282-122A-55085
35	486.5	21.3	491	12	US-10-282-122A-76022
36	484	21.2	476	12	US-10-282-122A-73039
37	482.5	21.1	477	12	US-10-282-122A-54019
38	482	21.1	481	12	US-10-282-122A-76478
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40	482	21.1	491	9	US-09-815-242-10032
41	482	21.1	491	12	US-10-282-122A-56416
42	481	21.1	480	9	US-09-815-242-12008
43	481	21.1	480	12	US-10-282-122A-66650
44	480.5	21.0	491	9	US-09-815-242-14079
45	480	21.0	482	12	US-10-282-122A-68321

ALIGNMENTS

RESULT 1
US-09-815-242-5297
; Sequence 5297, Application US/09815242
; Patent No. US20020061569A1
; GENERAL INFORMATION:
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari L.
; APPLICANT: Zyskind, Judith W.
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John D.
; APPLICANT: Carr, Grant J.
; APPLICANT: Yamamoto, Robert T.
; APPLICANT: Xu, H. Howard
; TITLE OF INVENTION: Identification of Essential Genes in Prokaryotes
; FILE REFERENCE: ELITRA.011A
; CURRENT APPLICATION NUMBER: US/09/815,242
; CURRENT FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 1410
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5297
; LENGTH: 437
; TYPE: PRT
; ORGNISM: Staphylococcus aureus

Sequence 74073, A
Sequence 71315, A
Sequence 116, App
Sequence 52628, A
Sequence 51682, A
Sequence 53624, A
Sequence 44665, A
Sequence 61427, A
Sequence 66060, A
Sequence 65124, A
Sequence 47281, A
Sequence 63073, A
Sequence 51373, A
Sequence 69707, A
Sequence 5862, Ap
Sequence 55678, A
Sequence 50582, A
Sequence 59579, A
Sequence 55085, A
Sequence 76022, A
Sequence 73039, A
Sequence 54019, A
Sequence 76478, A
Sequence 455, App
Sequence 10032, A
Sequence 56416, A
Sequence 12008, A
Sequence 66650, A
Sequence 14079, A
Sequence 68321, A

Mon Jun 28 09:30:49 2004

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; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 43780
; LENGTH: 437
; TYPE: PRT
; ORGANISM: Staphylococcus aureus
US-10-282-122A-43780

Query Match
Best Local Similarity 98.1%; Score 2239; DB 12; Length 437;
Matches 430; Conservative 2; Mismatches 5; Indels 0; Gaps 0;

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QY 61 DMVVIQGNAPASSHEEIVRAHQKLDVVSYNDFLQGIIDQYTSVAVTGAHGKTSITGLLS 120
DB 61 DMVVIQGNAPASSHEEIVRAHQKLDVVSYNDFLQGIIDQYTSVAVTGAHGKTSITGLLS 120

QY 121 HVNKGDKTSFLIGDGTGMLPSDYPFAFEACEYRRHFLSKPDYATMTNIDFDPDYFK 180
DB 121 HVNKGDKTSFLIGDGTGMLPSDYPFAFEACEYRRHFLSKPDYATMTNIDFDPDYFK 180

QY 181 DINDVDFAFQEMAHNVKGIANGDDSHLRKIEADVPYIYGFKSDSDIYAQNIQITDKG 240
DB 181 DINDVDFAFQEMAHNVKGIANGDDSHLRKIEADVPYIYGFKSDSDIYAQNIQITDKG 240

QY 241 TAFDVYVDGFFYDFHFLSPQYGDHVTMLALAVIAISYLEKLDVTNIKEALETFGGVKRRFN 300
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QY 301 ETTIANQVIVDDYAHHPREISATIDTARKKYPHKEWAVVQPHTFPSRTOAFNEFAESLS 360
DB 301 ETTIANQVIVDDYAHHPREISATIDTARKKYPHKEWAVVQPHTFPSRTOAFNEFAESLS 360

QY 361 KADRVFLCEIFGSIENSGALTIQDLIDKIGASFINEDLINVLEQFONAVVLFMGAGDI 420
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RESULT 4
US-09-925-637-2
; Sequence 2, Application US/09925637
; Patent No. US2002010338A1
; GENERAL INFORMATION:
; APPLICANT: Choi
; TITLE OF INVENTION: Staphylococcus aureus Polynucleotides and Polypeptides
; FILE REFERENCE: PB560
; CURRENT APPLICATION NUMBER: US/09/925,637
; CURRENT FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: PCT/US00/23773
; PRIOR FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: US 60/151,933
; PRIOR FILING DATE: 1999-09-01
; PRIOR APPLICATION NUMBER: US 08/781,986
; PRIOR FILING DATE: 1997-01-03

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; PRIOR APPLICATION NUMBER: US 08/556,171
; PRIOR FILING DATE: 1997-10-20
; PRIOR APPLICATION NUMBER: US 60/009,861
; PRIOR FILING DATE: 1996-01-06
; NUMBER OF SEQ ID NOS: 74
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 437
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-925-637-2

Query Match
Best Local Similarity 98.0%; Score 2238; DB 9; Length 437;
Matches 429; Conservative 3; Mismatches 5; Indels 0; Gaps 0;

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DB 1 MTHYHFVGKSGMSLSLAQIMHDLGHEVQSGSDIENYVTFEVALRNKGKIKILPFGANNIKE 60

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QY 301 ETTIANQVIVDDYAHHPREISATIDTARKKYPHKEWAVVQPHTFPSRTOAFNEFAESLS 360
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QY 361 KADRVFLCEIFGSIENSGALTIQDLIDKIGASFINEDLINVLEQFONAVVLFMGAGDI 420
DB 361 KADRVFLCEIFGSIENSGALTIQDLIDKIGASFINEDLINVLEQFONAVVLFMGAGDI 420

QY 421 QKLNAYLDKLGKNAF 437
DB 421 QKLNAYLDKLGKNAF 437

RESULT 5
US-10-084-205-2
; Sequence 2, Application US/10084205
; Publication No. US20030049648A1
; GENERAL INFORMATION:
; APPLICANT: Choi, Gil
; TITLE OF INVENTION: 37 Staphylococcus aureus Genes and Polypeptides
; FILE REFERENCE: PB515PI
; CURRENT APPLICATION NUMBER: US/10/084,205
; CURRENT FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: PCT/US00/23773
; PRIOR FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: 60/151,933
; PRIOR FILING DATE: 1999-09-01
; NUMBER OF SEQ ID NOS: 74
; SOFTWARE: PatentIn Ver. 3.1
; SEQ ID NO 2
; LENGTH: 437
; TYPE: PRT
; ORGANISM: Staphylococcus aureus
US-10-084-205-2

Query Match
Best Local Similarity 98.0%; Score 2238; DB 14; Length 437;

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Matches 429; Conservative 3; Mismatches 5; Indels 0; Gaps 0;

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QY 61 DMVVIQGNAPASSHEEIVRAHQKLDVVSYNDFLGQIIDQYTSVAVTGAGKTKTTGLLS 120
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Db 301 ETTIANQVIVDDYAHHPREISATIDTARKKYPHKEVAVFQPHTSRTQAFINEFAESLC 360
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Db 361 KADRVFLCEIFGSIRESNGALTIOQLIDKIGASFINEDLINVLQFONAVLFWAGDI 420
QY 421 OKLQNAVYLDKLGKNAF 437
Db 421 OKLQNAVYLDKLGKNAF 437

RESULT 6
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; Sequence 2, Application US/10712713
; Publication No. US20040082002A1
; GENERAL INFORMATION:
; APPLICANT: Choi, Gil
; TITLE OF INVENTION: 37 Staphylococcus aureus Genes and Polypeptides
; FILE REFERENCE: PB515PI
; CURRENT APPLICATION NUMBER: US/10/712,713
; CURRENT FILING DATE: 2003-11-14
; PRIOR APPLICATION NUMBER: US/10/084,205
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: PCT/US00/23773
; PRIOR FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: 60/151,933
; PRIOR FILING DATE: 1999-09-01
; NUMBER OF SEQ ID NOS: 74
; SOFTWARE: PatentIn Ver. 3.1
; SEQ ID NO 2
; LENGTH: 437
; TYPE: PRT
; ORGANISM: Staphylococcus aureus
US-10-712-713-2

Query Match 98.0%; Score 2238; DB 16; Length 437;
Best Local Similarity 98.2%; Pred. No. 3.1e-202;
Matches 429; Conservative 3; Mismatches 5; Indels 0; Gaps 0;

QY 1 MTHYFVGKSGMSSLAQIMHDLGHEVQGSDDIENYVTFEVALRNKGKILPFGANNIK 60
Db 1 MTHYFVGKSGMSSLAQIMHDLGHEVQGSDDIENYVTFEVALRNKGKILPFGANNIK 60
QY 61 DMVVIQGNAPASSHEEIVRAHQKLDVVSYNDFLGQIIDQYTSVAVTGAGKTKTTGLLS 120
Db 61 DMVVIQGNAPASSHEEIVRAHQKLDVVSYNDFLGQIIDQYTSVAVTGAGKTKTTGLLS 120
QY 121 HVMGDKKTSFLIGDGTGMGLPESDYFAFACVRRHFLSKYKPDYAIMTINIDFHPDYFK 180
Db 121 HVMGDKKTSFLIGDGTGMGLPESDYFAFACVRRHFLSKYKPDYAIMTINIDFHPDYFK 180

RESULT 7

US-10-282-122A-71178
; Sequence 71178, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangru
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 71178
; LENGTH: 437
; TYPE: PRT
; ORGANISM: Staphylococcus epidermidis
US-10-282-122A-71178

Query Match	85.5%	Score	DB 12;	Length	437;
Best Local Similarity	83.1%	Pred. No.	3e-175;		
Matches 363;	Conservative 45;	Mismatches 29;	Indels 0;	Gaps 0;	
1	MTHYHFVGIKSGMSSLAQIMEDLGHEVQGGSDIENYVTEVALRNKGKILPFGANNIKE	60			
1	MTHYHFVGIKSGMSSLAQIMEDLGHEVQGGSDIENYVTEVALRNKGKILPFGANNITK	60			
61	DMVVTQGNAPASSHETIVRAHGLKLDVVSYNDFLQIITDOYTSVAVTGAHGKTTSTGLLS	120			
61	EMVVTQGNAPDPNHEEIVRAHEKLKDIKYDFLGHVINQYTSVAVTGAHGKTTSTGLLS	120			
121	HYMNGDKTSPFLIGDTGMGLPESYFAFEACEYRRHFLSYKPDYVAIMTNDIDFHPDYFK	180			
121	HYMNGDKTSPFLIGDTGMGLPGSDYFAFEACEYRRHFLSYHPDYVAIMTNDIDFHPDYFK	180			
181	OINDVPDAPQEMAHNVKGGIIAWGDDHURKIEADVPYIYFGKSDDIYAQNIOITIDKG	240			
181	NIDDDVDAFQHMALNVKGGIIAWGDEYLRKLDVDIPVYIYFGKETDDIYAKNIQITISKG	240			
241	TAPDVTVCSEFYDHFLSPOYGRHTVLNALAVTAISYLEKLDVTNIKEALTEGGVKRRFN	300			
241	TQPDVTIKGEFYDQFLSPQYGNHNLNALAVTAISYLEDMNVENIKEALITEGGVKRRFN	300			
301	ETTIANQVIVDDYAHHPREISATIDTARKKYPHKEWVAVFQPHETTSRTQAFLENEAESLC	360			
301	ETKVSQVIVDDYAHHPREISATIEIARKKYPOKDVVAVFQPHETTSRTQAFLENEAESLS	360			
361	KADRVFLCEIFGSIRENSGALTIQDLIDKIGGASFINEDLINVLBPDNNVLFPMGAGDI	420			
361	KAQVFLCEIFGSIRENTGDLTIEDLINRIDGSTLIDENSIDVLEKFDNAVILFPMGAGDI	420			
421	QKIQNAVLDKLGKMQNAF	437			
421	OKLLKAYFEKLGKNDP	437			

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RESULT 8
US-10-282-122A-46331
Sequence 46331, Application US/10282122A
Publication No. US20040029129A1
GENERAL INFORMATION:
APPLICANT: Wang, Liangsu
APPLICANT: Zamudio, Carlos
APPLICANT: Malone, Cheryl
APPLICANT: Haselbeck, Robert
APPLICANT: Ohlsen, Kari
APPLICANT: Zyskind, Judith
APPLICANT: Wall, Daniel
APPLICANT: Trawick, John
APPLICANT: Carr, Grant
APPLICANT: Yamamoto, Robert
APPLICANT: Forsyth, R.
APPLICANT: Xu, H.
TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
FILE REFERENCE: ELITRA.034A
CURRENT APPLICATION NUMBER: US/10/282,122A
CURRENT FILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/230,335
PRIOR FILING DATE: 2000-09-06
PRIOR APPLICATION NUMBER: 60/230,347
PRIOR FILING DATE: 2000-09-09
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-10-23
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR FILING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/257,931

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; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 46331
; LENGTH: 436
; TYPE: PRT
; ORGANISM: Bacillus anthracis
US-10-282-122A-46331

Query Match      63.3%; Score 1446; DB 12; Length 436;
Best Local Similarity 63.8%; Pred. No. 1.6e-127;
Matches 275; Conservative 59; Mismatches 98; Indels 0; Gaps 0;

QY      1  MTHYHFGVIGKSGMSSLAQIMHDLGHEVQGSNDIYNYFTEVALRNGKIKILPFGANNIKE 60
Db      1  MTWYHFGVIGKSGMSSLAQILHDMKHTVQGSDEYKRFRTQALBKRNLISILPFDKSNVKE 60

QY      61  DMWVIOGNAFASHEERIVRAHOLKLDVVSYNDFLGQIIDQYTSVAVTGAHGKISTTGLLS 120
Db      61  GQVLIAGNAPDTHREELVAAKELNIPVHRZYHHFLGDLMNQVTSVAVTGAHGKISTTGLLA 120

QY      121  HVNGOKKTSFLIGDGTGMGLPESDYPAFACETVRRHFLSKYPDYALMTNDFDHPDYFK 180
Db      121  HVMQGAHPTSYLIGDGTGHGVENSKYVFCEACEYRRHFLSYNPDIYALMTNDFDHPDYFT 180

QY      181  DINDVFAPQMAHNVKKGIIAMGDDEHLRKIEDVPIYVYGFKQSDDIYAQNIQITDKG 240
Db      181  DINDVFAQEMALQVKKIIGIACGDDEELQKIQAKVPVIFYGFGEDNDFQARNIQKRTDG 240

QY      241  TAPDVVYDGFYDHFSLSPQYGDHTVNLALAVIALSYLEKLDVTNIIKEALETFGGVKRRPN 300
Db      241  TIFDVFVNTYDFTFKITGYGNHVSVLNALAVIALCHYENVVDVEAVKHQLTTFEGVKRRFN 300

QY      301  ETTIANQVIVDDYAHHPREISATIDTARKKYPKHEVVAVFQPHTFSRTOAFINEEAESLC 360
Db      301  EKPMEQVVIDDYAHHPTEINATTEAAKQKHPEREIVAVFQHTFSRTEKEFLDEFAESLS 360

QY      361  KADRVFELCEIFGSIARENSGALTIQDLIDPKIGASFINEDLINVLISQFQNAVVLFWAGADI 420
Db      361  KADQVYLCDIIFGSAIRENKGEILTIEDLQKRIDGABELITDITDVLKXKNGVLIIFWAGADI 420

QY      421  QKLNQAYLDKL 431
Db      421  OKFEAAVYKEV 431

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RESULT 9
US-10-282-122A-57306
; Sequence 57306, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078

```

```

; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-13-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 57306
; LENGTH: 445
; TYPE: PRT
; ORGANISM: Enterococcus faecalis
US-10-282-122A-57306

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Query Match 62.7%; Score 1430.5; DB 12; Length 445;
Best Local Similarity 61.4%; Pred. No. 4.8e-126;
Matches 261; Conservative 73; Mismatches 90; Indels 1; Gaps 1;

QY 4 YHFGVKGSGMSLAQIMHDLGHEVGSDIENYVTEVALRNKGKILPFGANNIKEDMV 63
DB 9 YHFGVKGSGMSLAQIMHDLGHEVGSDIENYVTEVALRNKGKILPFGANNIKEDMI 68
QY 64 VIQGNFASHEEIVRAHQKLDVSVNDFLQIIDQYTSVAVTGAGHKTSITGLSHVM 123
DB 69 VIAGNAPPDTHIEIARAIELGAEVIRVHDPIARIEFYTSIAVTGSHGKTSITGLAHVL 128
QY 124 NGDKTSLIGDGTGMLPESDYFAFEACEYRRHFLSYKPDYAIMTNIDPDHPDYFKDIN 183
DB 129 SGINPTSYLLIGDGTGHEGPDADFEAFACEYRRHFLSYKPDYAIMTNIDPDHPDYKSI 188
QY 184 DVFDAPQEMAHNVKGGIANGDDHURKIEADVPYIYVYGFKDDDIYAQNIQITDKGTAF 243
DB 189 DVFSAFQMAHQVKKGIKIFAYGDDDKYLQLESEVPYIYVYGVSEDDIQARNIQRTGSSSF 248
QY 244 DVYVDGEFYDHFSLSPQYGDHVTNLALAVIAISYLEKLDVTNKEALETFGKVRRFNETT 303
DB 249 DVYHKDDFVGHFVLPAGFHHNIMKALGVIAVAYFEKLDQKVAEMLSEFKGVKRFSEKK 308
QY 304 IANQVIVDDYAHHPREISATIDTARKKYPHKEVAVFQPHTFSTQAFLEPFAESLCKAD 363
DB 309 VSDMIIVDDYAHHPREISATIDTARKKYPHKEVAVFQPHTFSTQAFLEPFAESLCKAD 368
QY 364 RVFLCEITFGSIRENSGALTQDLIDKI-GGASFINEDLINVLEQFDNAVLFMGAGDIQK 422
DB 369 EVFLCNIFGSARETQGEVRIEDLGEKIQKGQGVITEONVSPILLDFENAVVFMGAGDVQK 428
QY 423 LQNAV 427
DB 429 FEQAY 433

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RESULT 10
US-09-815-242-10870
; Sequence 10870, Application US/09815242
; Patent No. US2002061569A1
; GENERAL INFORMATION:
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari L.
; APPLICANT: Zyskind, Judith W.

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; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John D.
; APPLICANT: Carr, Grant J.
; APPLICANT: Yamamoto, Robert T.
; APPLICANT: Xu, H. Howard
; TITLE OF INVENTION: Identification of Essential Genes in
; FILE REFERENCE: ELITRA.011A
; CURRENT APPLICATION NUMBER: US/09/815,242
; PRIOR FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10870
; LENGTH: 456
; TYPE: PRT
; ORGANISM: Enterococcus faecalis
US-09-815-242-10870

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```

Query Match 62.4%; Score 1425.5; DB 9; Length 456;
Best Local Similarity 61.2%; Pred. No. 1.5e-125;
Matches 260; Conservative 73; Mismatches 91; Indels 1; Gaps 1;

QY 4 YHFGVKGSGMSLAQIMHDLGHEVGSDIENYVTEVALRNKGKILPFGANNIKEDMV 63
DB 20 YHFGVKGSGMSLAQIMHDLGHEVGSDIENYVTEVALRNKGKILPFGANNIKEDMI 79
QY 64 VIQGNFASHEEIVRAHQKLDVSVNDFLQIIDQYTSVAVTGAGHKTSITGLSHVM 123
DB 80 VIAGNAPPDTHIEIARAIELGAEVIRVHDPIARIEFYTSIAVTGSHGKTSITGLAHVL 139
QY 124 NGDKTSLIGDGTGMLPESDYFAFEACEYRRHFLSYKPDYAIMTNIDPDHPDYFKDIN 183
DB 140 SGINPTSYLLIGDGTGHEGPDADFEAFACEYRRHFLSYKPDYAIMTNIDPDHPDYKSI 199
QY 184 DVFDAPQEMAHNVKGGIANGDDHURKIEADVPYIYVYGFKDDDIYAQNIQITDKGTAF 243
DB 200 DVFSAFQMAHQVKKGIKIFAYGDDDKYLQLESEVPYIYVYGVSEDDIQARNIQRTGSSSF 259
QY 244 DVYVDGEFYDHFSLSPQYGDHVTNLALAVIAISYLEKLDVTNKEALETFGKVRRFNETT 303
DB 260 DVYHKDDFVGHFVLPAGFHHNIMKALGVIAVAYFEKLDQKVAEMLSEFKGVKRFSEKK 319
QY 304 IANQVIVDDYAHHPREISATIDTARKKYPHKEVAVFQPHTFSTQAFLEPFAESLCKAD 363
DB 320 VSDMIIVDDYAHHPREISATIDTARKKYPHKEVAVFQPHTFSTQAFLEPFAESLCKAD 379
QY 364 RVFLCEITFGSIRENSGALTQDLIDKI-GGASFINEDLINVLEQFDNAVLFMGAGDIQK 422
DB 380 EVFLCNIFGSARETQGEVRIEDLGEKIQKGQGVITEONVSPILLDFENAVVFMGAGDVQK 439
QY 423 LQNAV 427
DB 440 FEQAY 444

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RESULT 11
US-10-282-122A-57651
; Sequence 57651, Application US/10282122A
; Publication No. US20040029129A1

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Query Match 49.5%; Score 1131; DB 12; Length 442;
Best Local Similarity 50.9%; Pred. No. 8.6e-98;
Matches 219; Conservative 77; Mismatches 132; Indels 2; Gaps 2;
QY 4 YHFCIKGSGSSLAQIMHDLGHEVQSDIENNVTEVALRNKGIKILPFGANNIKEDMV 63
DB 5 YHFIGIKSGMSALMLHQHKGHVQGSDEYKTYTQGLEQAGITILPFSNITPDME 64
QY 64 VIQGNFASFSSHEEIVRAHQKLDLVVSYNDFLQIIDDQYTSVAVTGAKGTSTTGLLSHVM 123
DB 65 LIVGNFARNENKEVALRHLQIPEKRYHDFLGDPMKSFISFAVAGARKTSTTGLLSHVL 124
QY 124 NGDKKTSFLIGGTGMLPESDYPAFAECYERHFLSYKPDYALMTNIDFDHPDYFKDIN 183
DB 125 KNITDTSYLIGGTGGRGSANAQYFVPESEYERHFEVYHPEYSIITNIDFDHPDYFTGIA 184
QY 184 DYFDPAQEMAHNVKGIILAWGDEHLRKTAEADVPIYYGFKDSDDIYAQNIQITDKGTAF 243
DB 185 DVNRAFNDYAKQVKALFYGGDEDLKKEAPAPIYYGFEENGFIAVDITRTTNGSDF 244
QY 244 DYYVDGEFYDHFSLSPQYGDHTVLNALAVIAISYLEKLDVTNIKEALETFGGVGRNETT 303
DB 245 KVKHGEVIGQEHVPAYGKHNTILNATAVIANLFWAGIDMALVADHLKTFSGVKRRFTEKI 304
QY 304 IANQVIVDDYAHHPREISATIDTARKKYPHKEVAVFQHPHFSRTOAFNEFAESLCAD 363
DB 305 INDTIIDDFAHPTTEIVATIDAAKQYKESKEIATFQPHITRTTALLEDFACALNEAD 364
QY 364 RVFLCEIFGSIRE-NSGALTIQDLIDK-IGGASFINEDLVLEQFDNAVVLPMGAGDIQ 421
DB 365 SVYLAQYGSAREVDKGEVKVEDLAAKIKPSQVVTVENVSPLLDHDNAVYVPMGAGDIQ 424
QY 422 KLNQAYDKL 431
DB 425 LYHESFEELL 434
RESULT 14
US-10-282-122A-72179
; Sequence 72179, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27

Db 121 HVVGAIPTSLVIGDGTGCTDAEYFALEACEYQHFALVAKPYATVIMINIDWHPDYFK 180
QY 181 DINDVDFADQEMAHNVKGIILAWGDEHLRKTAEADVPIYYGFKDSDDIYAQNIQITDKG 240
DB 181 SVDDVFNAFETLQKQKAVFALGDDAELRLKLTLDIPITYFGGEENFQAKQVIKETTG 240
QY 241 TAFDVTGGEFYDHFSLSPQYGDHTVLNALAVIAISYLEKLDVTNIKEALETFGGVGRRFN 300
DB 241 TKFDVYHREELSSFEIYAGDHNINLALSVIALCDYGLPVEDVKNELKTFEGVKRRFS 300
QY 301 ETTTANQVIVDDYAHHPREISATIDTARKKYPHKEVAVFQHPHFSRTOAFNEFAESLC 360
DB 301 ITEXGNQVIVDDYAHHPREISATIDTARKKYPHKEVAVFQHPHFSRTOAFNEFAESLC 360
QY 361 KADRVFLCEIFGSIRE-NSGALTIQDLIDK-IGGASFINEDLVLEQFDNAVVLPMGAGDI 420
DB 361 LADEVYLCDFIGSAREKTNLTADLAHKTGNHIIKEHTTELLUKYPEAVILPMGAGDV 420
QY 421 QKLNAY 427
DB 421 QKQAAV 427
RESULT 13
US-10-282-122A-74395
; Sequence 74395, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 74395
; LENGTH: 442
; TYPE: PRT
; ORGANISM: Streptococcus pyogenes
US-10-282-122A-74395

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; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 72179
; TYPE: PRT
; ORGANISM: Streptococcus mutans
; US-10-282-122A-72179

Query Match      49.3%; Score 1126.5; DB 12; Length 443;
Best Local Similarity 50.9%; Pred. No. 2.3e-97;
Matches 219; Conservative 79; Mismatches 129; Indels 3; Gaps 3;

Qy 5 HFVGIKSGMSSLAQIMHDI GHEVQSGSDIENYVTEVALRNKGIKILPFGANNIKEDMVV 64
Db 6 HFVGIKSGMSALALLHQMGKVKQSGSDVKYFTQGLEKAGIPILPFAESNITNDMEI 65

Qy 65 IQGNFASHE-ETVRAHQKLDVVSYNDFLQIIDIQYTSVAVTGAHGKTSTTGLLSHV 123
Db 66 IAGNAFKNNIEVAYALENGYHFKRYHEFLGFEMNQFTSLGVAGAHGKTSTTGLLAHV 125

Qy 124 NGCKTSLIGDGTGMGLPESDYAFACEYRRHFLSYKPDYAIMTIDFDPDYFKDI 182
Db 126 KNIITDTSFLIGDGTGRGLANSQYVFESDEYERHFMYPHPEYSIITNIDFDPDYFTSL 184

Qy 184 DVDFAFQEMAHNVKKGIIANGDDEHLRKIEADVPYIYGGKSDDIYAQNIQITDKGT 243
Db 186 DVFAAFNDYAKQVKKGLFVYGEDPILKLTSSAPYIYGFKNDDFVAYDIWRSNGSD 245

Qy 244 DVYVVDGEFYDHFHFLSPQGDHTVLNALAVIAISYLEKLDVTNIKEALETFGGVKRRFNE 303
Db 246 KVRGQNELSFFHVPAGRHNVLNATAVIANLYIAGVEMDLVROHLKTFSGVKRRFSEKL 305

Qy 304 IANQVIVDDYAHHPREISATIDTAPKYPHKEVAVFOPHTFSRTOAFINEFAESLCKAD 363
Db 306 INDVTIIDDFAHPTTEIATLDAARQKYPSEIYVAIFQPTFTTETIALLDDFAHALNQ 365

Qy 364 RVFLCEIPGSIRE-NSGALTIQDLIDKIGCA-SFINEDLINVLEQFDNAVLFMGAGDIQ 421
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Qy 422 KIQNAYLDK 431
Db 426 LYERSFELL 435

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RESULT 15

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US-09-815-242-13507
; Sequence 13507, Application US/09815242
; Patent No. US2002061569A1
; GENERAL INFORMATION:
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari J.
; APPLICANT: Zyskind, Judith W.
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John D.
; APPLICANT: Cart, Grant J.
; APPLICANT: Yamamoto, Robert T.
; APPLICANT: Xu, H. Howard
; TITLE OF INVENTION: Identification of Essential Genes in:
; FILE REFERENCE: ELITRA 011A
; CURRENT APPLICATION NUMBER: US/09/815,242
; CURRENT FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848

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; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13507
; LENGTH: 444
; TYPE: PRT
; ORGANISM: Streptococcus pneumoniae
; US-09-815-242-13507

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Query Match      48.5%; Score 1107; DB 9; Length 444;
Best Local Similarity 49.8%; Pred. No. 1.6e-95;
Matches 213; Conservative 79; Mismatches 132; Indels 4; Gaps 4;

Qy 4 YHFVGIKSGMSSLAQIMHDI GHEVQSGSDIENYVTEVALRNKGIKILPFGANNIKEDMV 63
Db 5 YHFVGIKSGMSALALLHQMGKVKQSGSDVKYFTQGLEQAGITILPFDKNDGDME 64

Qy 64 VIQGNF-ASSHEETVRAHQKLDVVSYNDFLQIIDIQYTSVAVTGAHGKTSTTGLLSHV 122
Db 65 IAGNAFKNNIEVAYADQNGISYKRYHEFLGSGFMRFVSMGVAGAHGKTSTTGLLSHV 124

Qy 123 MNGDKTSLIGDGTGMGLPESDYAFACEYRRHFLSYKPDYAIMTIDFDPDYFKDI 182
Db 125 LSHITDTSFLIGDGTGRGSANAKYVFESDEYERHFMYPHPEYSIITNIDFDPDYFTSL 184

Qy 183 NDVPDAFQEMAHNVKKGIIANGDDEHLRKIEADVPYIYGGK-DSDDIYAQNIQITDKGT 241
Db 185 EDVFNAFNDYAKQIITKGLFVYGEDAELRKITSDAPIYIYGFAGENDFVASDLRSTTGS 244

Qy 242 AFDVVDGEFYDHFHFLSPQGDHTVLNALAVIAISYLEKLDVTNIKEALETFGGVKRRFNE 301
Db 245 TETVHFRGNLQGFHPTFGRENIMNATAVIGLLYTAGFDLNLVREHLKTFAGVKRRFTE 304

Qy 302 TTIANQVIVDDYAHHPREISATIDTAPKYPHKEVAVFOPHTFSRTOAFINEFAESLCK 361
Db 305 KIVNDTVIIDDFAHPTTEIATLDAARQKYPSEIYVAIFQPTFTTETIALLDDFAHALNQ 364

Qy 362 ADRVFLCEIPGSIRE-NSGALTIQDLIDKIGCA-SFINEDLINVLEQFDNAVLFMGAGD 419
Db 365 ADAVYLAQIYGSAREVDHGDVKVEDLANKKHKHQTIVENVSPILDDHNAVYVFMGAGD 424

Qy 420 IQKQNAV 427
Db 425 IQTYEVSF 432

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Search completed: June 25, 2004, 09:01:05
Job time : 49 secs